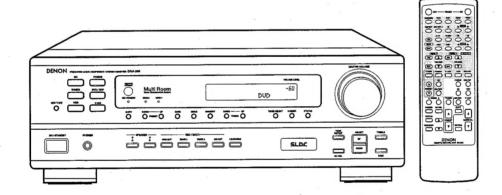
# DENON

Service manual

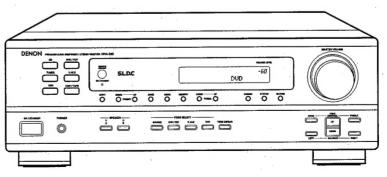


2~34



DRA-295

36~69





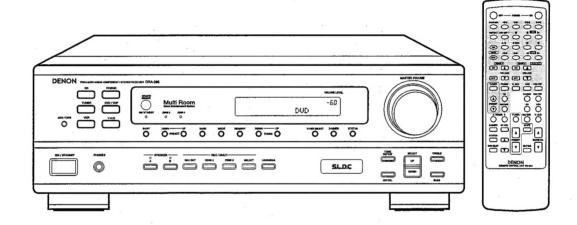
For U.S.A. & Canada model

# DENON

Hi-Fi AM-FM Stereo Receiver

# SERVICE MANUAL MODEL DRA-395

**AM-FM STEREO RECEIVER** 



### - TABLE OF CONTENTS -

SALLIT FILLOAUTIONS	
SPECIFICATIONS	2
DISASSEMBLY	3
ADJUSTMENT	4,5
BLOCK DIAGRAM	6
LEVEL DIAGRAM	7
SEMICONDUCTORS	8~12
PRINTED WIRING BOARDS	
NOTE FOR PARTS LIST	18
PARTS LIST OF P.W.B. UNIT ASS'Y	19~24
EXPLODED VIEW	25
PARTS LIST OF EXPLODED VIEW	26
PACKING VIEW	27

CAPETY DECALITIONS

PARTS	LIST OF PACKING & ACCESSORIES	27
WIRING	G DIAGRAM	28
SCHE	MATIC DIAGRAMS	29~34
(1/6)	INPUT UNIT	29
(2/6)	VOLUME UNIT	30
(3/6)	MAIN UNIT	31
(4/6)	VIDEO UNIT	32
	CONNECTOR UNIT	32
(5/6)	FRONT UNIT	33
	SWITCH UNIT	33
	POWER SW/HP UNIT	33
(6/6)	TUNER UNIT	34

· Some illustrations using in this service manual are slightly different from the actual set.

# NIPPON COLUMBIA CO., LTD.

14-14, AKASAKA 4-CHOME, MINATO-KU, TOKYO 107-8011 JAPAN Telephone: 03 (3584) 8111

## SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

# LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

# **SPECIFICATIONS**

Audio Section

(Power Amplifier)

Rated output:

 $80W + 80W (8\Omega/ohms, 20Hz \sim 20kHz \text{ with } 0.08\% \text{ T.H.D.})$ A or B 4 to  $16\Omega$ /ohms

Output terminals:

8 to  $16\Omega$ /ohms A + B

(Analog)

LINE input - PRE OUT

Input sensitivity/input impedance:

200mV/47kΩ/kohms 10Hz ~ 50kHz: ±1,5dB

Frequency response:

100 dB (IHF-A weighted)

S/N ratio: Total harmonic distortion:

0.009% (-3dB at rated output,  $8\Omega$ /ohms) (1kHz)

Rated output:

**PHONO input - REC OUT** 

 $2.5 \text{mV}/47 \text{k}\Omega/\text{kohms}$ 

Input sensitivity/input impedance: **RIAA** deviation:

 $\pm 0.5$ dB (20Hz ~ 20kHz)

S/N ratio:

74dB (IHF-A weighted, with 5mV input) 0.03% (1kHz, 3V)

Total harmonic distortion: Rated output/Maximum output:

150mV/7V

Video Section

(Standard Video Jacks)

Input/output level and impedance:

1V p-p, 75Ω/ohms

Frequency response:

5Hz ~ 10MHz +1, -3dB

Tuner Section

**[FM]** (note:  $\mu V$  at 75 $\Omega$ /ohms, 0dBf = 1×10<sup>-15</sup>W)

[AM] 520kHz ~ 1710kHz 18<sub>u</sub>V

Receiving range:

87.50MHz ~ 107.90 MHz 1.4µV (14.2dBf)

Usable sensitivity: 50dB quieting sensitivity:

MONO 2.8µV (20.2dBf)

S/N ratio:

**STEREO** 23µV (38.5dBf)

MONO

80dB (IHF-A weighted)

**STEREO** 

75dB (IHF-A weighted)

Total harmonic distortion:

MONO 0.15% (1kHz) STEREO

0.3% (1kHz)

General

Power supply:

AC120V, 60Hz

Power consumption:

3.39A

Maximum external dimensions:

Weight:

434 (W)  $\times$  147 (H)  $\times$  417 (D) mm (17-1/16"  $\times$  5-25/32"  $\times$  16-7/16")

9.7kg (21lbs 6oz)

Remote Control Unit (RC-894)

**Batteries:** 

R03/AAA Type (two batteries)

**External dimensions:** 

64 (W) × 206 (H) × 19 (D) mm (2-13/64" × 8-9/32" × 3/4")

Weight:

140g (Approx. 4.9 oz) (including batteries)

<sup>\*</sup> For purposes of improvement, specifications and design are subject to change without notice.

# **DISASSEMBLY**

(Follow the procedure below in reverse order when reassembling)

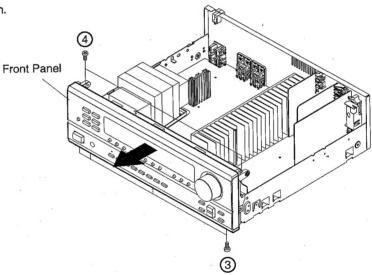
# **Top Cover**

Remove 6 screws 1 and 3 screws 2, detach the Top Cover in the arrow direction.

Top Cover

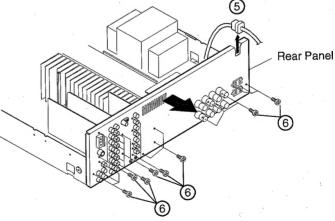
# **Front Panel**

- Remove 4 screws (3) and 2 screws (4).
   Detach the Front Panel in the arrow direction.



# **Rear Panel**

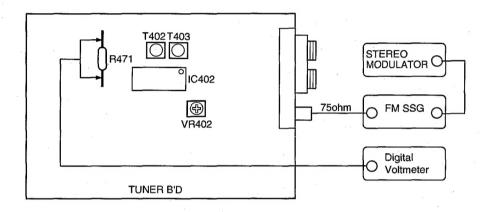
- Remove cord bushing (5) from the Rear Panel.
   Remove 26 screws (6).
   Detach the Rear Panel in the arrow direction.



# **ADJUSTMENT**

# Tuner Section CONNECTION DIAGRAM OF MEASURING INSTRUMENTS

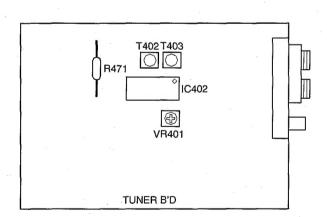
# • FM



### FM ALIGNMENT

LIVI P	LIGNMEN											
	Alianonana	Tuning		Input					Output		Adjustment	
Step	Alignment Item	Frequency Setting	Type	Frequency	Input Level	Modulation	Coupling	Туре	Connect to	Points	Adjust to	
1	Center Adjustment	98.1MHz (98.0MHz)	FM SSG	98.1MHz	60dBμ	Mono 1kHz 100%	Antenna Terminal	Digital Voltmeter	R471	T402	± 50mV	
2	Distortion	98.1MHz (98.0MHz)	FM SSG	98.1MHz	60dBμ	Mono 1kHz 100%	Antenna Terminal	Distortion Meter	Output Terminal (L)	T403	Minimum Distortion	
3	Repeat Steps 1 and 2											
4	Signal Level	98.1MHz (98.0MHz)	FM SSG	98.1MHz	20dBμ	OFF	Antenna Terminal		JNED" on isplay	VR402	20 <sup>±14</sup> <sub>10</sub> dB	

### AM



# **AM ALIGNMENT**

Cton	Alignment	Fraguenay	lonut	Ou	tput	A	djustment	Remarks
Step	ltem	Frequency	Input	Type	Connect to	Points	Adjust to	nemarks
1	Signal Level	999 (1000) kHz	AM SSG	_	_	VR401	Light "TUNED" on FL Display	SSG OUTPUT 74dBμ (EMF)

# **Audio Section**

### **Idling Current**

Required measurement equipment : DC Voltmeter

### Preparation

- (1) Avoid direct blow from an air conditioner or an electric fan, and adjust the unit at normal room tempereture 15 °C ~ 30 °C (59 °F ~ 86 °F).
- (2) Presetting
  - POWER (Power source switch)

OFF

SPEAKER (Speaker terminal)

→ No load (Do not connect speaker, dummy resistor, etc.)

## Adjustment

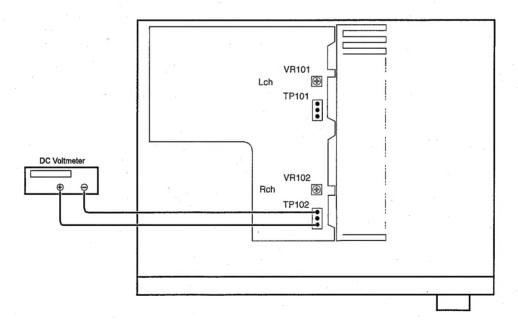
- (1) Remove top cover and set VR101, VR102 on Amp. Unit at full counterclockwise ( ) position.
- (2) Connect DC Voltmeter to test points (Lch: TP101, Rch: TP102).
- (3) Connect power cord to AC Line, and turn power switch "ON".
- (4) Presetting.

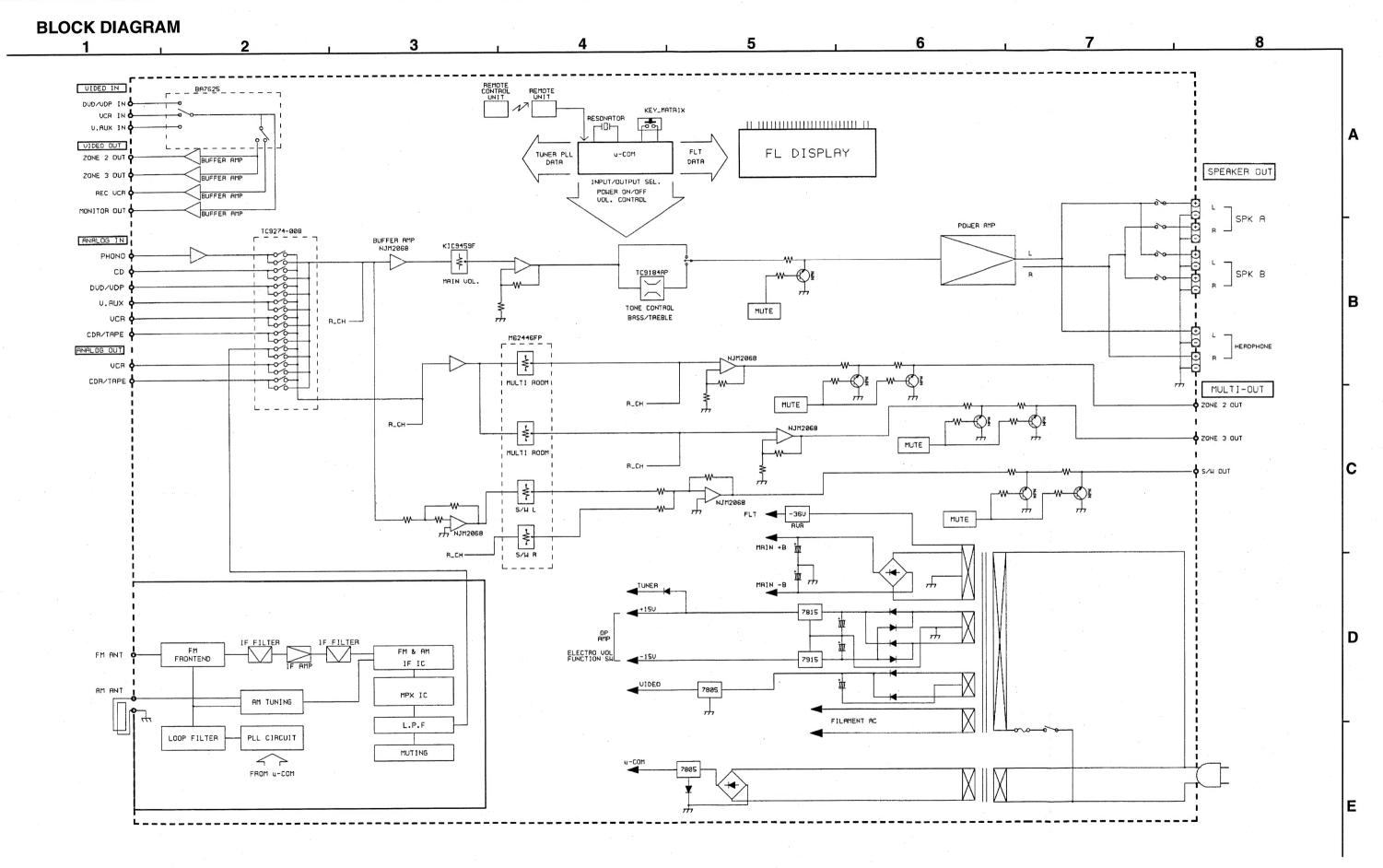
MASTER VOLUME : "---" counterclockwise ( min.)

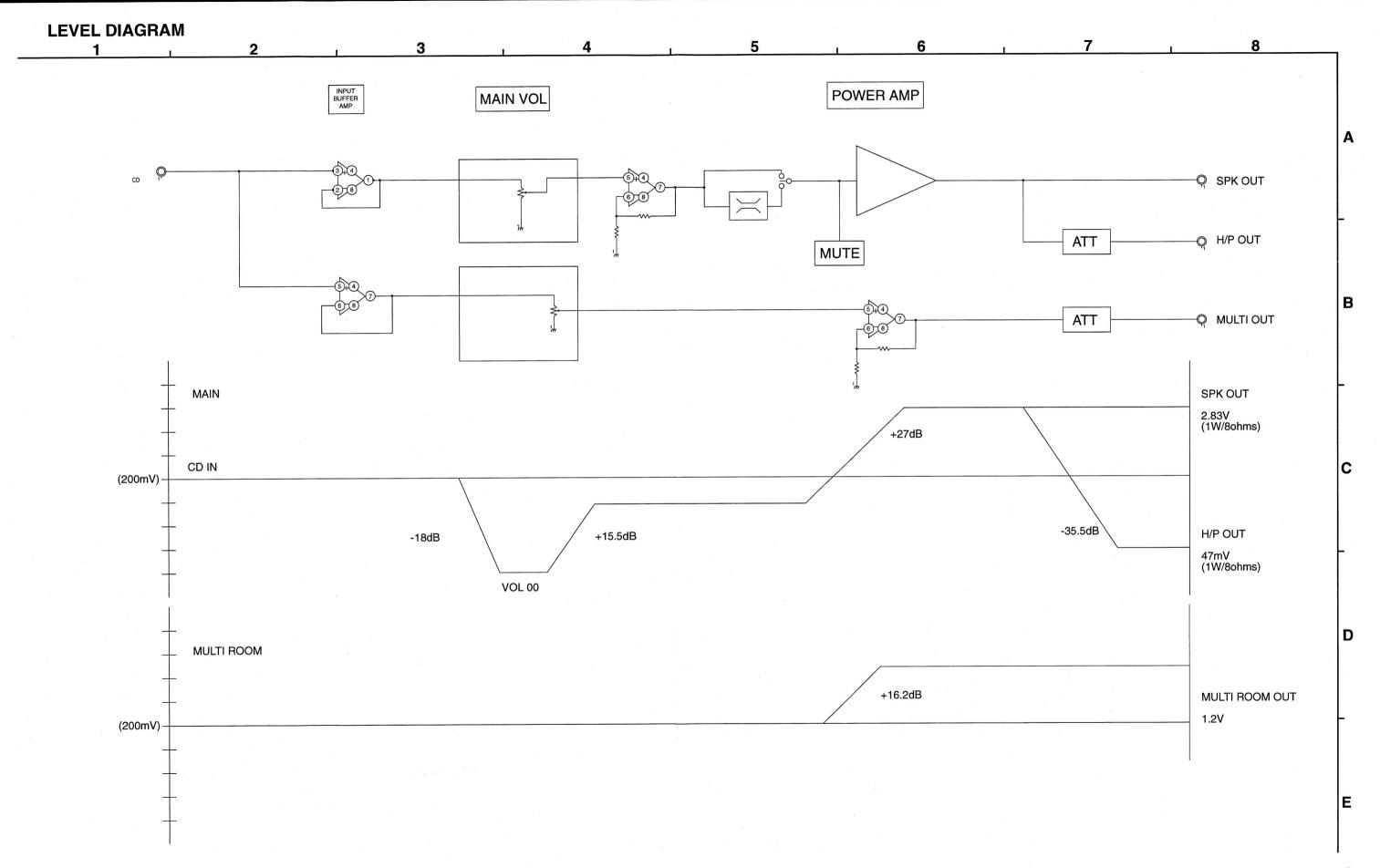
**FUNCTION** 

: CD

- (5) Within 2 minutes after the power on, turn VR101 clockwise ( ) to adjust the TEST POINT voltage to 1.5 mV ±0.5 mV
- (6) After 10 minutes from the preset above, turn VR101 to set the voltage to 2.5 mV ±0.5 mV DC.
- (7) Adjust the Variable Resistors of other channels in the same way.

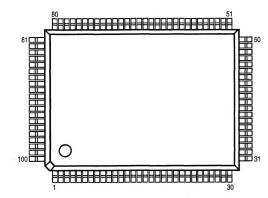






# **SEMICONDUCTORS**

● IC's CXP82840-319Q (IC900)

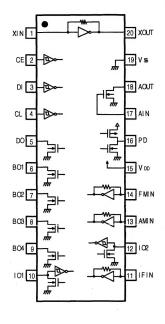


# **CXP82840-319Q Terminal Function**

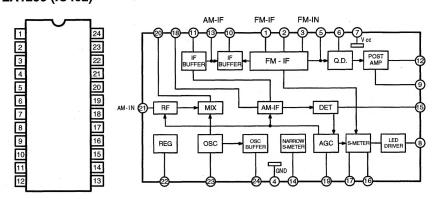
Pin No.	Pin Name	1/0	Function			
1	G2/A1	0	FL G02			
2	G2/A1 G1/A0		FL G02			
	NC(Vdd)	Ť	NC(Connect to Vdd)			
	POWER DOWN	H	AC OFF Detect			
5	ENC VOLUME UP	Ϊ́Τ	Encoder VOLUME UP			
6	RDS CLOCK	<del>                                     </del>	RDS clock input(TDA7330)			
7	ENC VOLUME DOWN	H	Encoder VOLUME DOWN			
8	REMOCON	H	Remote signal input.			
9	PROTECTION	H	Protection detecting input.			
	SUB ZONE2 LED	0	ZONE3 LED indicator control			
	SUB ZONE1 LED		ZONE2 LED indicator control			
	62446 LATCH	ō	Electronic volume control (M62446 LATCH)			
	FUNCTION SW 1 CE	ō	Function IC control.(TC9274 CE)			
	FUNCTION 1/2 DATA	0	Function IC control.(TC9274 DATA)			
	FUNCTION 1/2 CLOCK	0.	Function IC control.(TC9274 CLOCK)			
	VOLUME,PLL,4094,DATA	0	LC72131,M62446,KIC9459,TC9184,TC4094(DATA)			
	VOLUME,PLL,4094,CLOCK	ŏ	LC72131,M62446,KIC9459,TC9184,TC4094(CLOCK)			
	TUNED	Ĭ.	TUNED signal in.			
	STEREO	ΙĖ	STEREO signal in.			
	IF COUNT	li	PLL data in.(LC72131)			
	TUNER MUTE	Ö	Tuner mute output.			
	PLL CE	ō	LC72131(CE)			
	4094 STB	0	TC4094(STB)			
	VOLUME STB		KIC9459,TC9184(STB)			
	SUB 1 MUTE	Ō	ZONE2 mute control.			
	MAIN MUTE	Ŏ	MAIN.Subwoofer mute output.			
	POWER RELAY	l o	Power supply relaycontrol.			
	AV REF.	Ti	Reference voltage input for A/D converter.			
	1511 DATA	Ó	Not used.			
	RDS DATA	1	Not used.			
	KEY IN 1	1	Key input 1			
	KEY IN 2	1	Key input 2			
	KEY IN 3	ı	Key input 3			
34	STEP OPTION	1	Area select.			
	SET OPTION	I	Model select.			
36	SPEAKER A LED 1	0	SPEAKER A LED indicator control			
	A VSS	1	A/D converter GND.			
	RESET	Ĩ	Low-level active, system reset.			
	EXTAL	1	EXTAL(10MHz)			
	XTAL	0	XTAL(10MHz)			
	VSS	I	GND			
	NC(TX)	0	Not used.			
	G(TEX)	1	GND			
	VDD	I	Vcc SUPPLY.			
	VFDP	1	FDP voltage supply.			

Pin No.	Pin Name	1/0	Function
46	SPEAKER B LED 2	0	SPEAKER B LED indicator control
47	STBY LED 3	0	STANDBY LED indicator control
48	PD2/A53	0	FL P38
49	PD3/A52	0	FL P37
50	PD4/A51	0	FL P36
51	PD5/A50	0	FL P01
	PD6/A49	0	FL P02
	PD7/A48	0	FL P03
54	PF0/A47	0	FL P04
55	PF1/A46	0	FL P05
	PF2/A45	0	FL P06
	PF3/A44	0	FL P07
58	PF4/A43	0	FL P08
	PF5/A42	0	FL P09
	PF6/A41	0	FL P10
61	PF7/A40	0	FL P11
	PG0/A39	0	FL P12
	PG1/A38	0	FL P13
	PG2/A37	0	FL P14
	PG3/A36	0	FL P15
	PG4/A35	0	FL P16
	PG5/A34	0	FL P17 FL P18
68	PG6/A33 PG7/A32	0	FL P19
	PH0/A31	0	FL P20
	PH1/A30	0	FL P21
	PH2/A29	0	FL P22
	PH3/A28	ŏ	FL P23
74	PH4/A27	0	FL P24
	PH5/A26	ō	FL P25
	PH6/A25	ō	FL P26
77	PH7/A24	ō	FL P27
78	A23	ō	FL P28
79	A22	0	FL P29
80	A21	0	FL P30
81	A20	0	FL P31
82	A19	0	FL P32
83	A18	0	FL P33
84	A17	0	FL P34
85	A16	0	FL P35
86	G16		FL G16
87	G15		FL G15
88	G14		FL G14
89	Vdd		Vcc SUPPLY.
90	G13	0	FL G13
91	G12		FL G12
92	G11	0.	FL G11
93	G10	0	FL G10
94	G9	0	FL G09
95	G8	0	FL G08
96	G7		FL G07
97	G6	0	FL G06
98	G5	0	FL G05
99	G4	0	FL G04
100	G3	0	FL G03

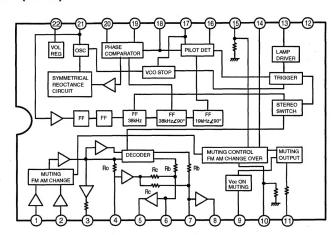
# LC72131M (IC401)



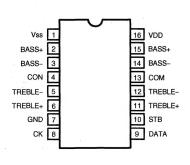
# LA1266 (IC402)

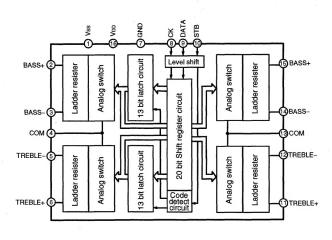


# LA3401 (IC403)

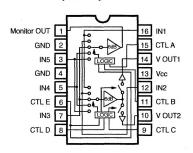


# TC9184AP (IC602)





# BA7625 (IC501)



Α	В	Е	MONITOR OUT
ш	اـ	*	IN 1
Η	ا ا	*	IN 2
L	Н	*	IN 3
Н	Н	L	IN 4
Н	Н	Н	IN 5

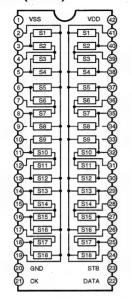
С	D	Е	V OUT 1
L	L	*	******
Н	L	*	IN 2
L	Н	*	IN 3
Н	Н	L	IN 4
Н	Н	Н	IN 5

С	D	Ε	V OUT 2
L	L	*	IN 1
Н	L	*	_
L	Н	*	IN 3
Н	Н	L	IN 4
Н	Н	Н	IN 5

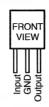
Note 1: Note 2:

\* mark means that feasible for either H or L. Each input terminal is provided with sink chip clamp (BA7625). Each input terminal takes 20kohm at the end (BA7626).

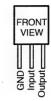
### TC9274N-008 (IC303)



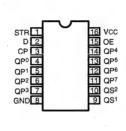
# KIA7805AP (IC103) NJM7805FA (IC104) KIA7815AP (IC101)



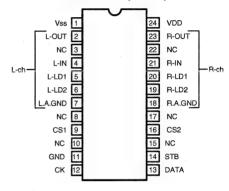
# NJM7915FA (IC102)



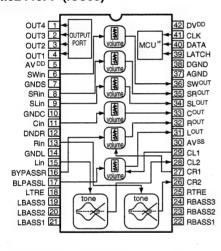
# PC74HC4094 (IC604)



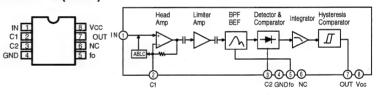
KIC9459F (IC601)



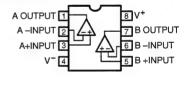
# M62446FP (IC603)



CXA1511M(IC502)



### NJM2068DD (IC300~302, 605~610)



# • IC PROTECTOR

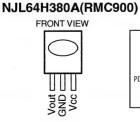
ICP-N15 (IC105)

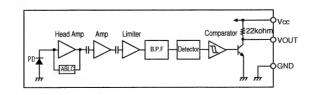


# POSISTOR P43T7D330BW16









## TRANSISTORS

DTA114EK DTA114YK DTC114YK



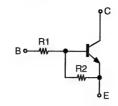
# DTA114ES DTA144ES DTC114ES DTC114YS DTC144ES



	R1	R2
DTA114EK	10kohm	10kohm
DTA114ES	10kohm	10kohm
DTA114YK	10kohm	47kohm
DTA114ES	47kohm	47kohm

**DTA** series

### **DTC** series



	R1	R2
DTC114ES	10kohm	10kohm
DTC114YK	10kohm	47kohm
DTC114YS	10kohm	47kohm
DTC144ES	47kohm	47kohm

ROI	
C	T B

KTC3880S

TOP VIEW DC 2SD947F **KTA1266Y** KSA992F **KSC1845F** KTC3200BL KTC3198Y KTA1268BL **KSA916Y** 2SC1740S

KTC2874B



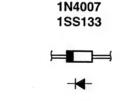
2SB1560 2SD2390



# DIODES (LED Included)

MTZJ3.3B MTZJ5.1B MTZJ5.6B MTZJ6.2B MTZJ6.8B MTZJ7.5A MTZJ7.5B MTZJ18B MTZJ20B

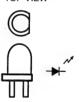




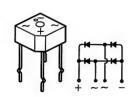


**KDS160** 

# HL-50RDRF4 TOP VIEW

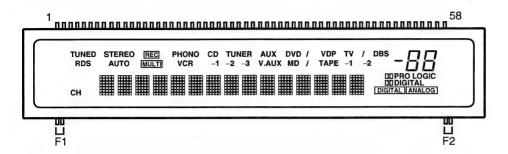


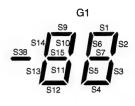
# KBPC604



# • FL DISPLAY

# 16-st-42GNK (FL900)





G16 TUNE RDS	STE AU	то	M	313 REC	٧	312 ONO CR	G10 CD	1 -	G9 JNER 2 -3	V.AU	x	G6 DVD MD	1	G4 VDP TAPE	G3 TV -1	G2 / DBS -2,	G1
СН			14			G11			G8							mnor	RO LOGIC GITAL ANALOG

	G	2~G	116	
S1	S2	S3	S4	S5
S6	S7	S8	S9	S10
S11	S12	S13	S14	S15
S16	S17	S18	S19	S20
S21	S22	S23	S24	S25
S26	S27	S28	S29	S30
S31	S32	S33	S34	S35

# Pin Assignment

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CONNECTION	F1	F1	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18
PIN NO.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CONNECTION	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33	S34	S35	S36	S37	S38
PIN NO.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58		
CONNECTION	G16	G15	G14	G13	G12	G11	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1	F2	F2		

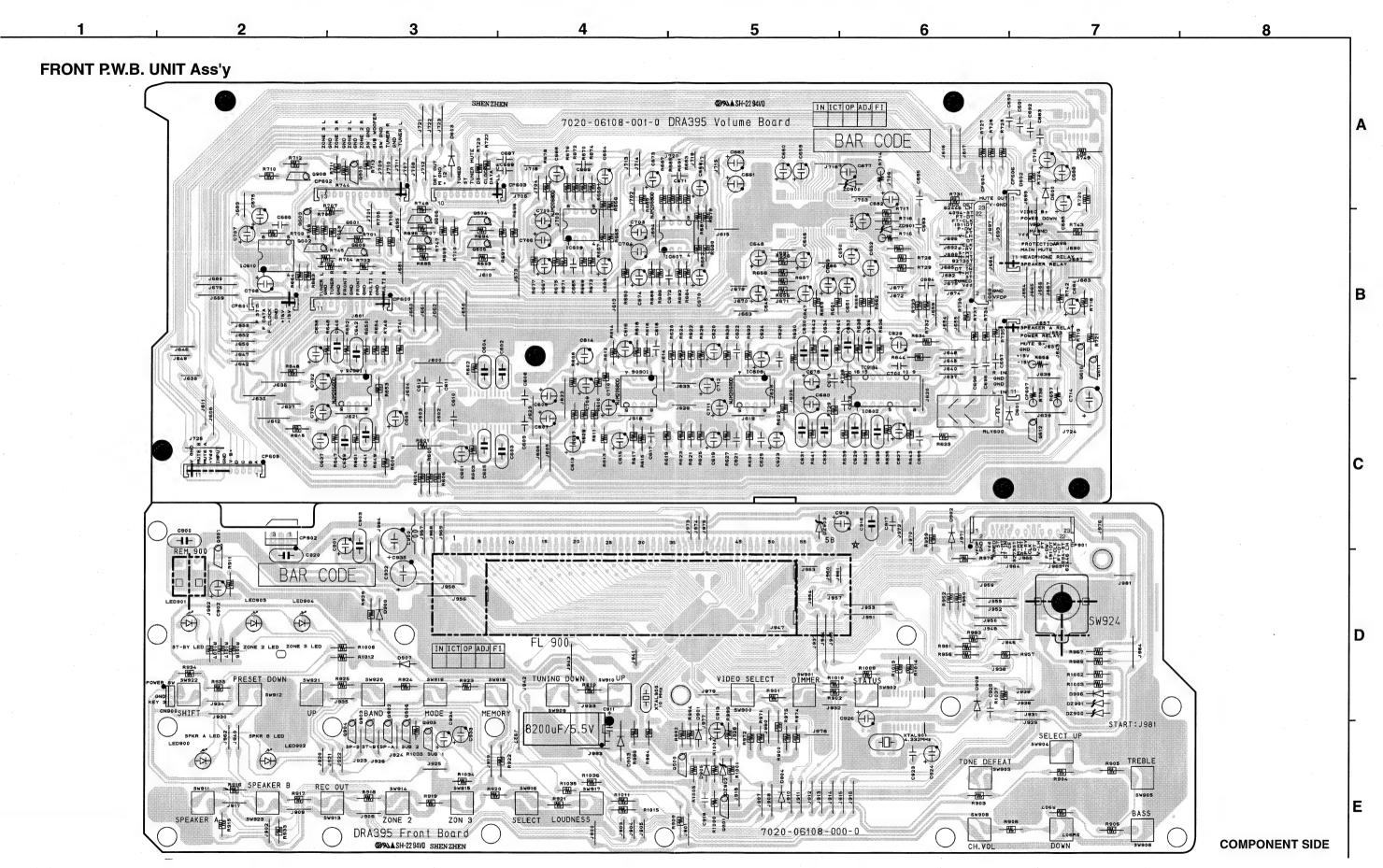
F1,F2 : Filament G1~G16 : Grid S1~S38 : Anode

# **Anode & Grid Assignment**

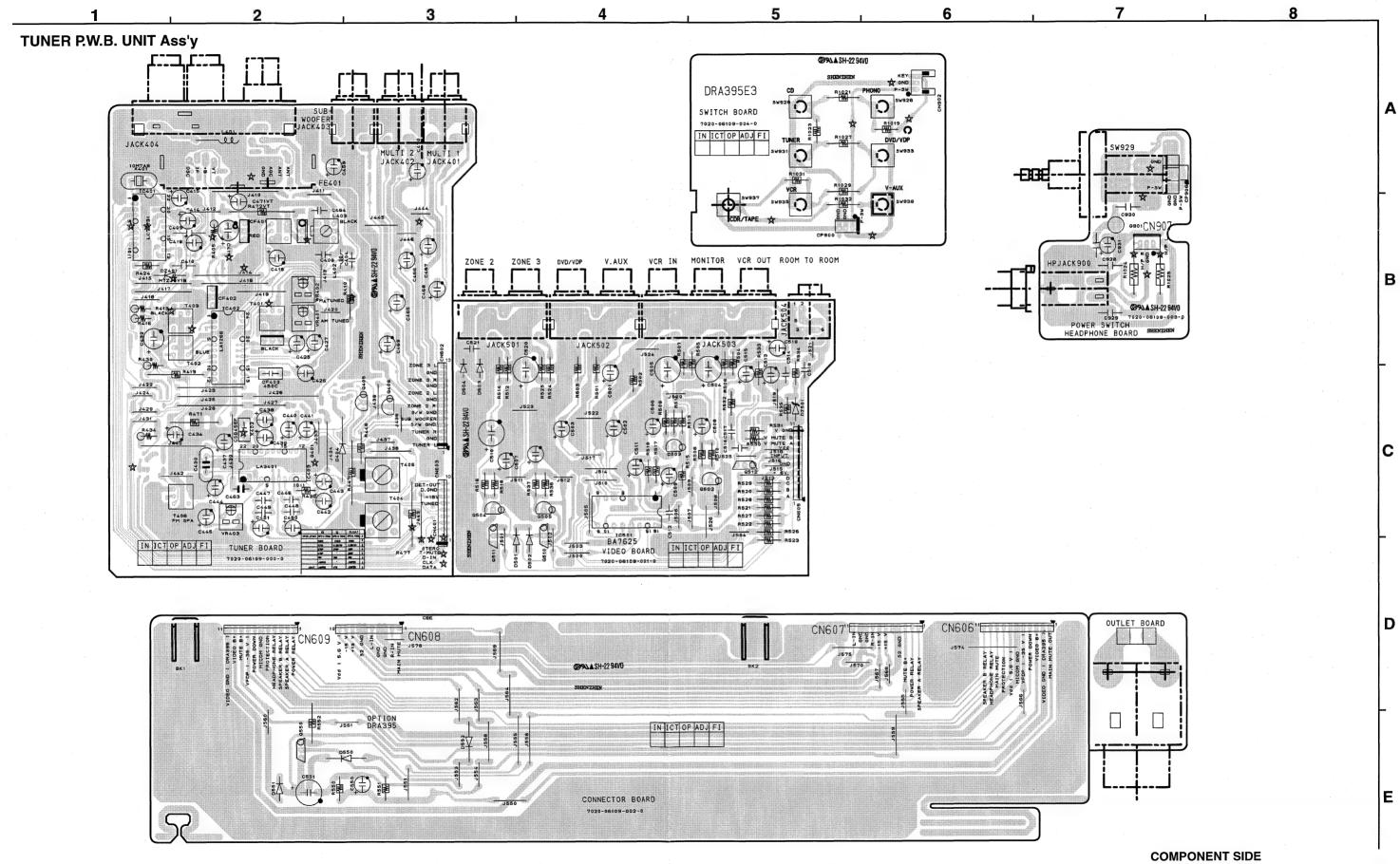
-			· · · · · · · · · · · · · · · · · · ·									
ſ		G1	G2~G16	-	G1	G2~G16		G1	G2~G16		G1	G2~G16
Ī	S1	S1	S1	S10	S10	S10	S19		S19	S28		S28
1	S2	S2	S2 -	S11	S11	S11	S20		S20	S29		S29
١	S3	S3	S3	S12	S12	S12	S21		S21	S30		S30
-	S4	S4	S4	S13	S13	S13	S22		S22	S31		S31
١	S5	S5	S5	S14	S14	S14	S23		S23	S32		S32
١	S6	S6	S6	S15	S15	S15	S24		S24	S33		S33
١	S7	S7	S7	S16		S16	S25		S25	S34		S34
١	S8		S8	S17	DIGITA	AL S17	S26		S26	S35	-	S35
١	S9	S9	S9	S18	DE PRO LO	GICS18	S27		S27			

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	G16
S36	DIGITAL	/	TV	VDP	/(DVD)	DVD	AUX		TUNER	CD		PHONO	REC		STEREO	TUNED
S37	ANALOG	-2	-1	TAPE	/(MD)	MD	V.AUX		-2	-1		VCR	MULT	l ——	AUTO	RDS
S38	S38	DBS					-		-3							CH

# **PRINTED WIRING BOARDS** MAIN P.W.B. UNIT Ass'y Q109 Q113 25B1560 START: J232 **SP9**3.▲ SH-22 94V0 8200/63 BAR CODE F101 8A/125V E **COMPONENT SIDE**

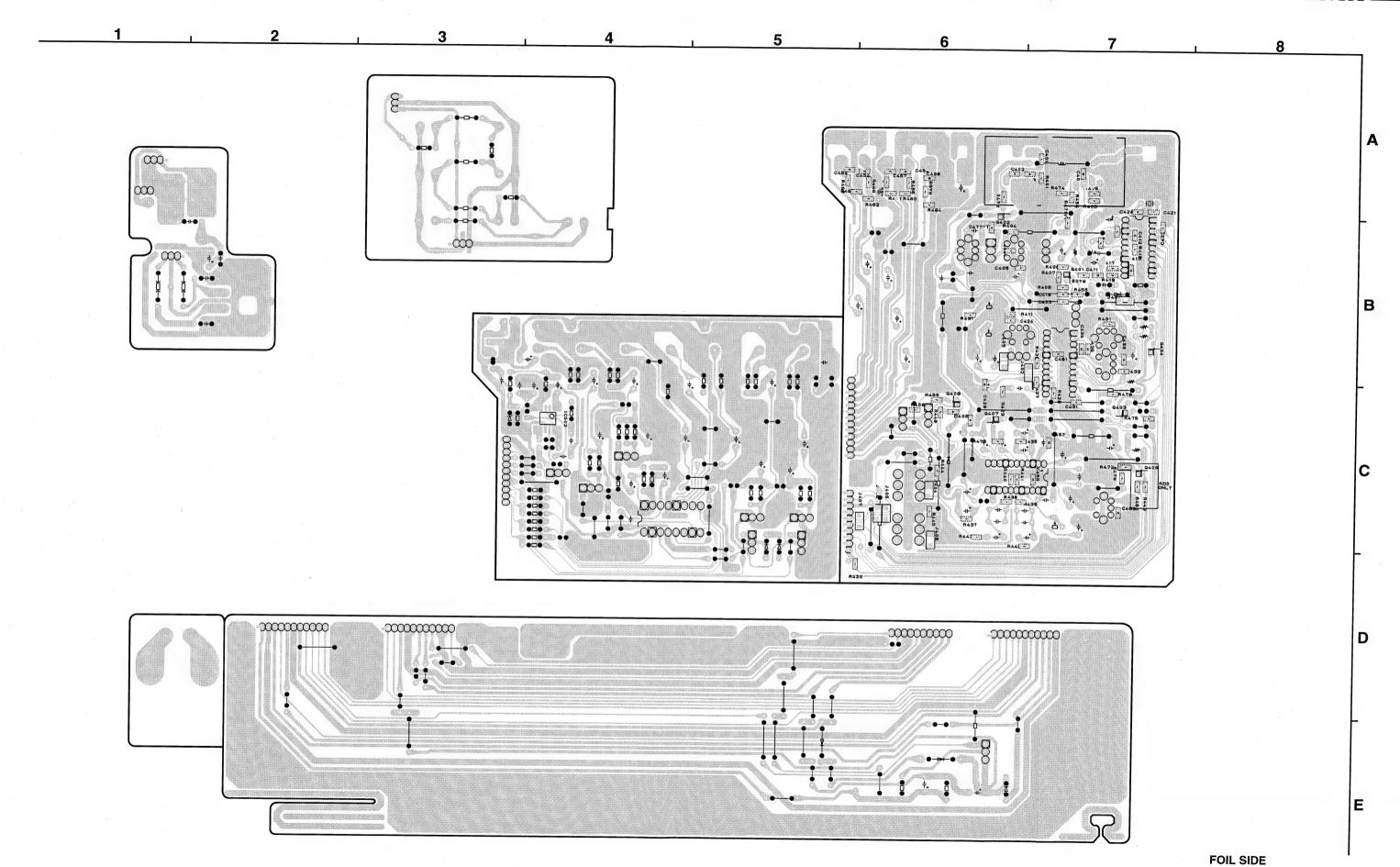


38 38 **FOIL SIDE** 



16

DRA-395



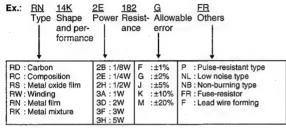
17

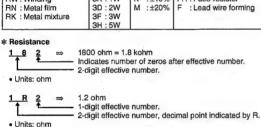
# NOTE FOR PARTS LIST

- Part indicated with the mark "<sup>®</sup>" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.) WARNING:

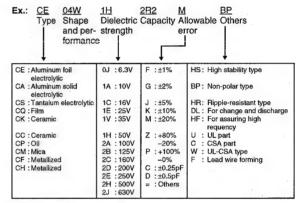
Parts marked with this symbol  $\triangle$  have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

### Resistors





### Capacitors



### \* Capacity (electrolyte only)

2 2 2 ⇒ 2200μF Indicates number of zeros after effective number. 2-digit effective number.

• Units: μF.

1-digit effective number. - 2-digit effective number, decimal point indicated by R. Units: μF.

### \* Capacity (except electrolyte)

2200pF=0.0022μF

• Units: pF.

2-digit effective number.

• Units: pF

. When the dielectric strength is indicated in AC, "AC" is included after the dieelectric

# PARTS LIST OF P.W.B. UNIT MAIN P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks
SEMICON	DUCTORS (	GROUP		R162-164	244 2055 996	Metal film 1.2kohm 1W (NB)	C060012265050
IC101	963 0057 903	IC KIA7815AP	J126781500060	R165	244 2043 937	Metal oxide 10ohm 1W (NB)	C041010065060
IC102	963 0044 806	IC NJM7915FA	J126791500010	R166	244 2043 982	Metal film 0.22ohm 1W (NB)	C060R22065050
IC103	960 0057 709	IC KIA7805AP	J126780500360	R173	963 9003 068	Metal film 4.7ohm 1/4W (NB)	C0604R7063050
IC104	960 0196 001	IC NJM7805FA	J126780500130	R190,191	963 0045 203	Winding 0.1ohm 5W	C144R10069110
IC105	960 0195 808	IC ICP-N15	J120001500030	R195-197	244 2043 982	Metal film 0.22ohm 1W (NB)	C060R22065050
10100				R201	244 2043 982	Metal film 0.22ohm 1W (NB)	C060R22065050
IC300-302	960 0179 701	IC NJM2068DD	J121206800000	R208	963 9005 105	Carbon film 68ohm 1/4W	C000068063520
IC303	963 0071 400	IC TC9274N-008	J080927400010	R209	963 0043 108	Metal film 2.2Mohm 1/2W	C060022574000
10000	000 001 1 100	10 10021 111 000					
Q101,102	960 0196 603	Transistor KTC2874B	J502287400010	VR101,102	960 0091 601	Semi fixed resistor 1kohm	C544102015130
Q103-106	960 0196 205	Transistor KSA992Y	J5000992F0050	1			
Q107,108	960 0196 506	Transistor KSC1845F	J5021845F0000	CARACIT	ORS GROUI		
Q115,116	960 0196 506	Transistor KSC1845F	J5021845F0000		Ons Gnool		D04000007000
Q117-119	963 0022 006	Transistor DTC114YS	J6020114Y0050	C101,102		Electrolytic 22uF/50V	D040220087060
Q120	960 0196 302	Transistor KTA1268BL	J5001268B0050	C103,104	200 0005 440	Electrolytic 10uF/50V	D040100087070
Q121	960 0196 700	Transistor KTC3200BL	J5023200B0050	C105,106		Ceramic 100pF/50V	D004101067060
Q122	960 0189 005	Transistor KSA916Y	J5000916Y0050	C107,108	963 9003 165	· ·	D009092212500
Q123	960 0005 105	Transistor KTA1266Y	J5001266Y0050	C109,110		Electrolytic 47uF/25V	D040470084070
Q124	960 0005 202	Transistor KTC3198Y	J5023198Y0000	C111,112	963 9005 121	Ceramic 33pF/500V	D00033006D050
Q125	960 0196 302	Transistor KTA1268BL	J5001268B0050	C115,116	963 9005 134	Ceramic 1200pF/50V	D004122287050
Q126,127	960 0005 202	Transistor KTC3198Y	J5023198Y0000	C117,118		Electrolytic 47uF/50V	D040470087060
Q128	960 0196 302	Transistor KTA1268BL	J5001268B0050	C119,120	963 9003 084	Ceramic 100pF/500V	D00410106D050
Q129,130	960 0005 202	Transistor KTC3198Y	J5023198Y0000	C121,122		Electrolytic 10uF/50V	D040100087070
Q131,132	960 0196 302	Transistor KTA1268BL	J5001268B0050	C123,124	963 9003 084	· ·	D00410106D050
Q133,134	960 0196 409	Transistor 2SC1740SR	J5021740S0010	C125,126	963 9004 517	Ceramic 0.022uF/50V	D004223597050
Q136	963 0022 006	Transistor DTC114YS	J6020114Y0050	C127-130	963 9003 097	Mylar film 0.1uF/250V	D02010407H080
4100	000 0022 000	Translator Brotinio	0002011110000	C135	963 9004 504		D004103097060
D101-113	963 0020 309	Diode 1SS133	K000013300520	C136		Electrolytic 2.2uF/50V	D0402R2087100
D101-113	963 0058 407	Diode 1N4007	K000400700520	C137	963 9004 504	Ceramic 0.01uF/50V	D004103097060
D120,121	963 0020 309	Diode 1SS133	K000013300520	C138,139		Electrolytic 1uF/50V	D040010087080
D120,121	963 0020 309	Diode 1N4007	K000400700520	C140	963 9005 147	Ceramic 0.1uF/25V	D004104594050
D126-129	963 0020 309	Diode 1SS133	K000013300520	C141		Electrolytic 220uF/6.3V	D040221081230
D130,131	963 0058 407	Diode 1N4007	K000400700520	C142	963 9005 147	Ceramic 0.1uF/25V	D004104594050
D130,131	963 0030 407	Diode 1SS133	K000400700320	C143		Electrolytic 220uF/6.3V	D040221081230
D132-133	903 0020 308	Diode 133133	K000013300320	C144,145	963 9005 260	Electrolytic 8200uF/63V	D040822088030
DD101 100	000 0107 107	Diode KBPC604	K047604000020	C146-150	963 9003 097	Mylar film 0.1uF/250V	D02010407H080
DB101,102	900 0197 107	Diode KDFC004	K047004000020	C151		Electrolytic 1uF/50V	D040010087080
D7404 400	000 0040 000	Zanas diada MITZ HOD	V00010D044500	C152	963 9005 163	Electrolytic 1000uF/50V	D040102087080
DZ101,102	963 0046 202		K06018R044520	C153-155	963 0021 900	Mylar film 0.047uF/100V	D02047306C060
DZ103,104	963 0047 405		K06007R544520	C156	960 9007 201	Electrolytic 3300uF/35V	D040332085010
DZ105		Zener diode MTZJ20B	K06020R044520	C157	963 9003 123	Electrolytic 1000uF/35V	D040102085040
DZ106	960 0095 500		K06005R144520	C158-161		Electrolytic 10uF/50V	D040100087070
DZ107-110	963 0047 502	Zener diode MTZJ3.3B	K06003R344520	C162		Electrolytic 4.7uF/50V	D0404R7087100
				C164	963 9003 136	Electrolytic 1000uF/25V	D040102084060
RESISTO	RS GROUP			C167,168		Electrolytic 1uF/50V	D040010087080
R117,118		Metal film 47ohm 1/4W (NB)	C060047063050	<b>△</b> C169	963 9005 176	Ceramic 4700pF/250V (AC)	D008472089010
R127-130	244 2052 957	` '	C060056265070	C170	963 9005 299	Electrolytic 100uF/100V	D04010108C200
R135,136		Metal film 4.7ohm 1/4W (NB)	C0604R7063050	C171,172	963 0021 900	Mylar film 0.047uF/100V	D02047306C060
R137-140		Metal film 0.22ohm 1W (NB)	C060R22065070	C173	963 9005 286	Electrolytic 3300uF/16V	D040332083100
R141,142		Metal film 4.7ohm 1/4W (NB)	C0604R7063050	C174		Electrolytic 10uF/50V	D040100087070
R143-146		Metal film 0.22ohm 1W (NB)	C060R22065070	C176	963 0021 900	Mylar film 0.047uF/100V	D02047306C060
R153-156		Metal oxide 10ohm 1W (NB)	C041010065060				
11100-100	2-TT 20TO 001	motal oxide roomin (ND)	0041010000000		L		L

Ref. No.	Part No.	Part Name	Remarks		Ref. No.	Part No.	Part Name	Remarks	Q'ty
C301		Electrolytic 10uF/50V	D040100087050		RLY104	960 0181 605	Relay (G5PA-1-8)	G680120502010	1
C302,303	963 9005 273	Ceramic 220pF/50V	D004221067060						
C304		Electrolytic 10uF/50V	D040100087050		<b>∆</b> T101	960 0185 708	Power trans. (Sub)	8200280960010	1
C307,308		Electrolytic 220uF/6.3V	D040221081050						
C311,312	963 9005 118	Ceramic 100pF/50V	D004101067060		TP101,102	960 0161 405	3P connector base	L101530140310	2
C313,314	963 9004 779	Mylar film 0.024uF/50V	D020243167050						ľ
C315,316	960 9008 695	Mylar film 6800pF/100V	D02068206C060		*		Heat sink	2120043538050	1
C317,318		Electrolytic 4.7uF/50V	D0404R7087250		*	963 0018 007	Screw 3×8 (B)-Z	B020030081B10	2
C319,320	963 9004 517	Mylar film 0.022uF/50V	D004223597050	.	*	963 0090 009	Shield plate	3070210146000	1
C321-324		Electrolytic 47uF/25V	D040470084100						
C325,326	963 9005 118	Ceramic 100pF/50V	D004101067060	- 1		-			
C327,328		Electrolytic 4.7uF/50V	D0404R7087250	ŀ					
C329,330		Electrolytic 10uF/50V	D040100087050	- 1					
C331,332	963 9005 118	Ceramic 100pF/50V	D004101067060	- 1					
C333,334		Electrolytic 4.7uF/50V	D0404R7087250						
C335,336	963 9005 118	Ceramic 100pF/50V	D004101067060				•		
C337,338		Electrolytic 10uF/50V	D040100087050	1					
C339-344	963 9005 118	Ceramic 100pF/50V	D004101067060						1
C347-349		Electrolytic 1uF/50V	D040010087080						
·			- 4						
OTHER P	ARTS GROU	JP		Q'ty					
CN600	963 0086 709	11P connector base	L101100031110	1				-	
CN601	963 0085 700	6P connector base	L101100030610	1					
								* *	
CP101	960 0197 505		L108202000220	1					
CP102	960 0123 304	2P connector base	L104353280200	1					
CP103	963 0081 403	4P connector base	L104353280400	1					
CP104	960 0128 804	· ·	L102526700600	1					
CP107	960 0123 207	3P connector base	L102526700300 L101100041010						
CP608	963 0088 008	10P connector base 11P connector base	L101100041010	¦					
CP609 CP907	963 0087 805 963 0048 909	3P connector base	L1011220030000	ΪI					
OF307	903 0040 909	Si Connector Dase	L10122000000	`I					
<b></b> ∆F101	960 0188 705	Fuse 8A/125V	G650802121060	1					
<b></b> ∆F102	963 0089 803	Fuse 6.3A/125V	G650632121150	1					
	A								
F101A,B	960 0005 804	Fuse clip	G645000050010	2					
F102A,B	960 0005 804	Fuse clip	G645000050010	2				·	
GND101,102	960 9006 600	GND terminal	3790040876010	2					
14014400	000 0074 000	OD encelor to mine!	C614091036104	ا ،					
JACK102		8P speaker terminal	G61408103610A	. ¦					
JACK104	960 0181 508		G435204004010					,	
JACK301	960 0188 307		G603060610010	' I					
JACK302	960 0188 200		G602040610000	1		1			
JACK303	960 0188 307	or pin jack	G603060610010	'					
L101,102	963 0049 005	Inductor 0.5uH	D330R50000000	2					
DLV404	000 0101 700	Bolow (CERA CO)	CEOUSADEOUGG						
RLY101		Relay (G5PA-28)	G680240502020	١, ١					
RLY102		Relay (RSB24S)	G680240202010 G680240502020	1					
RLY103 .	300 0101 702	Relay (G5PA-28)	G000240302020			L			

# FRONT P.W.B. UNIT ASS'Y

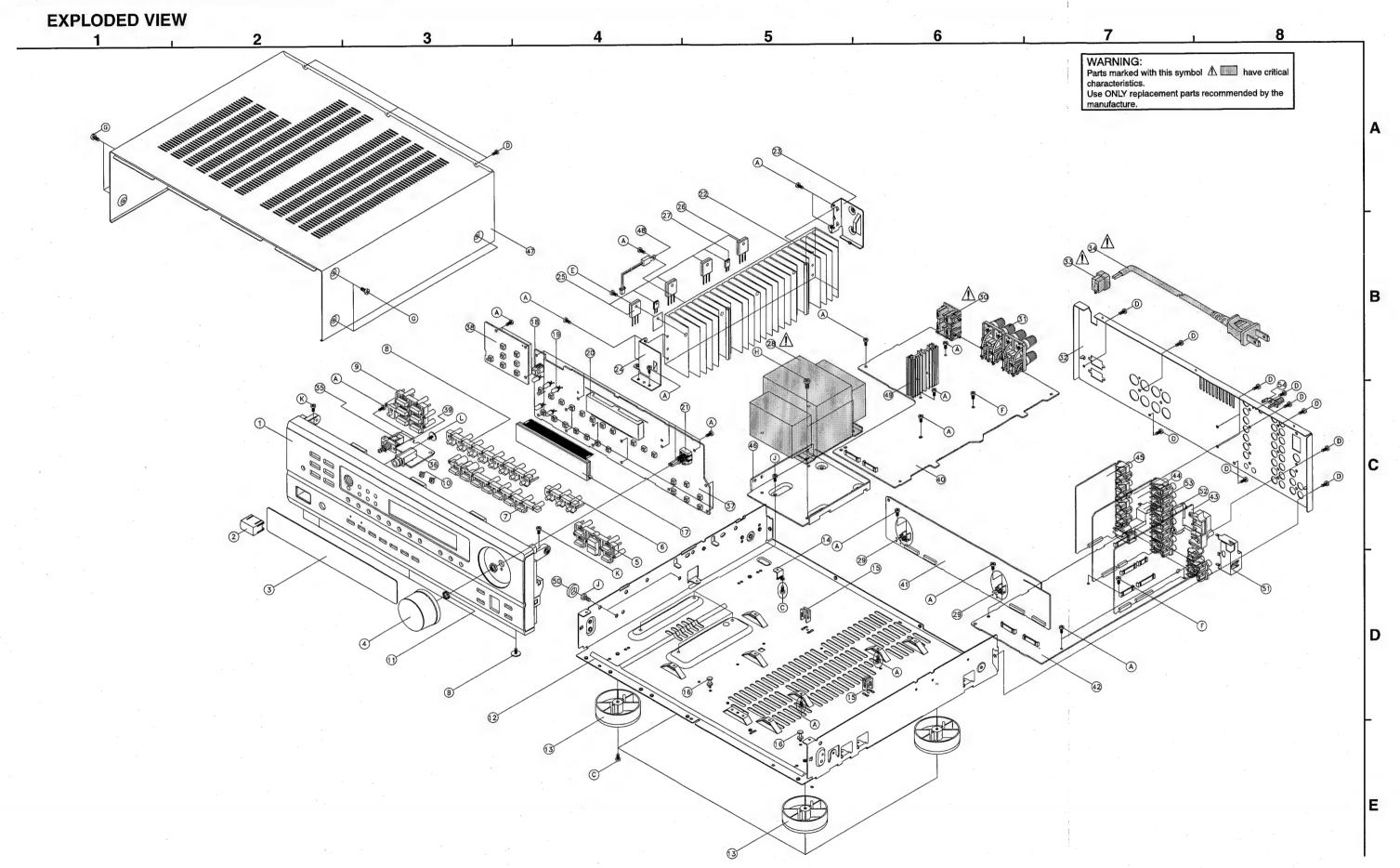
Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks
SEMICON	DUCTORS (	GROUP		R977-980	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
IC601	960 0133 307	IC KIC9459F	J084945900010	R982	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
IC602	963 0043 506	IC TC9184AP	J080918400010	R985-987	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
IC603	960 0179 604	IC M62446FP	J084624460010	R990,991	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
IC604	960 0195 400	IC PC74HC4094D	J040744094020	R993	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
IC605-610	960 0179 701	IC NJM2068DD	J121206800000	R995	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
10000	000 0000 400	IC CVPDDDAA 0100	1000000400400				
IC900	963 0090 106	IC CXP82840-319Q	J020828403190		ORS GROU		D0404D7007400
Q600-607	960 0196 603	Transistor KTC2874B	J502287400010	C600,601		Electrolytic 4.7uF/50V	D0404R7087100
Q610,611	963 0075 309	Transistor DTA114ES	J6000114E0010	C602,603	963 9005 192	Mylar film 1500pF/100V	D02015206C060
Q612	963 0022 006	Transistor DTC114YS	J6020114Y0050	C604,605	963 9005 202	Mylar film 0.1uF/50V	D020104167050
4012	000 0022 000	Translator Bronnie		C606,607		Electrolytic 47uF/25V	D040470084070
Q900	960 0196 409	Transistor 2SC1740SR	J5021740S0010	C608,609	963 9004 504	Ceramic 0.01uF/50V	D004103097060
Q901	963 0075 503	Transistor DTC144ES	J6020144E0010	C610-612	963 9005 118	Ceramic 100pF/50V	D004101067060
Q902-904	963 0081 306	Transistor DTC114ES	J6020114E0010	C613-616		Electrolytic 10uF/50V	D040100087050
Q902-904 Q905,906	960 0196 409	Transistor 2SC1740SR	J5021740S0010	C617,618	963 9005 215	Ceramic 39pF/50V	D000390067050
Q905,906 Q907	963 0081 209	Transistor DTA144ES	J6000144E0010	C619,620		Electrolytic 2.2uF/50V	D0402R208710C
Q907 Q908,909	960 0196 603	Transistor KTC2874B	J502287400010	C621,622	963 9005 118	Ceramic 100pF/50V	D004101067060
Q900,909	900 0190 003	Hansistor K102074D	3502207400010	C623,624		Electrolytic 3.3uF/50V	D0403R308705C
D004 000	000 0000 000	Diada 400400	K000010000500	C625,626	963 9005 228	Ceramic 47pF/50V	D000470067050
D601,602	963 0020 309	Diode 1SS133	K000013300520	C627,628		Electrolytic 4.7uF/50V	D0404R7087100
D603	963 0058 407	Diode 1N4007	K000400700520	C629,630	960 9008 695	Mylar film 6800pF/100V	D02068206C060
D900-902	963 0020 309	Diode 1SS133	K000013300520	C631,632	963 9003 409	Mylar film 0.01uF/50V	D020103167050
D903	963 0058 407	Diode 1N4007	K000400700520	C633,634	963 9005 231	Mylar film 0.056uF/50V	D020563067050
D904-907	963 0020 309	Diode 1SS133	K000013300520	C635,636	960 9003 302	Mylar film 3300pF/50V	D020332167050
				C637,638		Electrolytic 10uF/50V	D040100087050
DZ900,901	960 0095 607	Zener diode MTZJ5.6B	K06005R644520	C639,640	963 9000 155	Mylar film 0.22uF/63V	D020224078060
DZ902	963 0047 502	Zener diode MTZJ3.3B	K06003R344520	C641,642	963 9003 409	Mylar film 0.01uF/50V	D020103167050
DZ903	960 0095 801	Zener diode MTZJ6.8B	K06006R844520	C645		Electrolytic 10uF/50V	D040100087050
				C648	0.00	Electrolytic 10uF/50V	D040100087050
ZD900,901	960 0222 603	Zener diode MTZJ7.5A	K06007R544530	C649-652		Electrolytic 4.7uF/50V	D0404R7087100
		•		C659,660		Electrolytic 3.3uF/50V	D0403R308705C
LED900-904	960 0197 204	LED HL50RDRF4T	K500052015010	C661,662		Electrolytic 22uF/25V	D04022008405C
				C663,664		Electrolytic 4.7uF/50V	D0404R7087100
FL900	960 0180 509	FLT (16-ST-42GNK)	K530164200010	C665,666	963 9005 244	Ceramic 150pF/50V	D000151067060
				C667,668	303 3003 244	Electrolytic 10uF/50V	D040100087050
DEGICTO	DO ODOUD		<u> </u>	11			D0404R7087100
	RS GROUP		T	C669,670	000 0005 044	Electrolytic 4.7uF/50V	
R657,658	960 9003 700	Metal film 10ohm 1/4W (NB)	C060010063050	C671,672	963 9005 244		D000151067060
				C673-675		Electrolytic 10uF/50V	D040100087050
R714,715	244 2052 960	Metal film 220ohm 1W (NB)	C060022165050	C676		Electrolytic 100uF/25V	D040101084060
R736	960 9004 301	Metai film 47ohm 1/4W (NB)	C060047063050	C677		Electrolytic 4.7uF/50V	D0404R7087100
				C678,679	963 9004 504	Ceramic 0.01uF/50V	D004103097060
R912-914	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C680		Electrolytic 100uF/25V	D040101084060
R926-928	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C681,682		Electrolytic 4.7uF/50V	D0404R7087100
R930-932	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C683	963 9005 118	Ceramic 100pF/50V	D004101067060
R936-949	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C684,685		Electrolytic 0.1uF/100V	D0400R108C00C
R951	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C686	963 9005 121	Ceramic 33pF/50V	D000330067050
R953-955	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C687	963 9005 118	Ceramic 100pF/50V	D004101067060
R958	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C688		Electrolytic 47uF/25V	D040470084070
R960-966	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C689-698	963 9005 118	Ceramic 100pF/50V	D004101067060
R968-970	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C699,700	963 9005 257	Mylar film 0.022uF/50V	D020223167050
R973	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160				

# TUNER P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks		Ref. No.	Part No.	Part Name	Remarks
C701-712	Tartito.	Electrolytic 10uF/50V	D040100087050	<b></b>		DUCTORS		***
C701-712		Electrolytic 47uF/25V	D040470084070	- II	IC401	963 0043 700	IC LC72131	J120721310030
C713		Electrolytic 100uF/35V	D04010108505C	- 11	IC401	963 0043 700	IC LA1266	J124126600010
C/ 14		Electrolytic Toodi 755V	D040101000000	- 11	IC402	963 0043 904	IC LA3401	J124340100010
0000	002 0004 000	Mylar film 0.047uF/100V	D02047306C060	H	10403	963 0044 000	IC LA3401	3124340100010
C900	963 0021 900	Electrolytic 1uF/50V	D040010087080	- 11	10504	960 0175 200	IC BA7625	J171762500000
C901		Electrolytic 47uF/25V	D040470084070		IC501 IC502	960 0173 200	IC CXA1511M	J030151100010
C902	002 0004 000	Mylar film 0.047uF/100V	D02047306C060		10302	900 0174 104	IC CAAISTIW	3030131100010
C903 C904-909	963 9004 575		D010101167160		0404	963 0058 300	Transistor KTC3880S	J5223880O0210
	963 9004 708	Ceramic chip 100pl /50V	D010101107160		Q401	963 0036 300		J5200114Y0210
C910	963 0061 504	· ·	D040822080010		Q402 Q403,404	963 0079 303		J5200114T0210
C911 C912	963 9004 708		D011104577160	- 11	Q405,406		Transistor KTC2874B	J502287400010
	903 9004 700	Electrolytic 4.7uF/50V	D0404R7087100	- 11			Transistor DTC114YK	J5220114Y0210
C913 C914,915	963 9004 698	Ceramic chip 0.01uF/50V	D0404117007100		Q407 Q408	963 0024 208 963 0058 203	· ·	J5200114F0210
C914,915	963 9004 696	Mylar film 0.047uF/100V	D02047306C060	- 11	Q400	903 0030 203	Hallsision DIATIALK	3320011420210
C918	963 9004 504	Ceramic 0.01uF/50V	D004103097060	- 11	Q502-505	960 0005 105	Transistor KTA1266Y	J5001266Y0050
C919	903 9004 304	Electrolytic 47uF/50V	D040470087060	- 11	Q510,511	963 0022 006	Transistor DTC114YS	J6020114Y0050
C919	963 0021 900	Mylar film 0.047uF/100V	D02047306C060		Q510,511 Q512	963 0022 000	Transistor DTA144ES	J6000144E0010
C920 C932	903 0021 900	Electrolytic 100uF/50V	D040101087060		Q512 Q550	963 0081 209	Transistor DTA114ES	J6000114E0010
C932,934		Electrolytic 33uF/16V	D04033008305C		COOU	963 0075 309	Halisisioi DIATIALS	3000011420010
C333,334		Liectrorytic oour / rov	2040000000000	- 11	D403	960 0197 000	Diode KDS160	K005016000010
					D403	963 0020 309	Diode 1SS133	K000013300520
OTHER P	ARTS GROU	JP		Q'ty	D404 D405,406	960 0197 000		K005016000010
CN900	963 0089 706	3P connector cord (L=100)	L000101030070	1	D405,406	900 0197 000	Diode RDS100	10000010000010
					D501-504	963 0020 309	Diode 1SS133	K000013300520
CP600	963 0087 805	11P connector base	L101100041110	1	D550	963 0058 407	Diode 1N4007	K000400700520
CP601	963 0087 009	6P connector base	L101100040610	1	D551	963 0020 309		K000013300520
CP602	960 0128 700	13P connector base	L101353361310	1	D552	963 0058 407	Diode 1N4007	K000400700520
CP603	963 0088 008	10P connector base	L101100041010	1				
CP604	963 0071 206	23P FFC connector base	L131520452345	1	DZ401	960 0095 500	Zener diode MTZJ5.1B	K06005R144520
CP605	963 0087 805	11P connector base	L101100041110	1				
CP607,608	963 0087 805		L101100041110	2	DZ501	960 0095 704	Zener diode MTZJ6.2B	K06006R244520
CP901	963 0071 109		L131520442345	1				
CP902	963 0049 102	3P connector base (L)	L102526803010	1		<u> </u>		1
			D000101001000			RS GROUP		00000400014400
L900	960 0128 008	Inductor 100uH	D330101001020		R401	963 9004 821	•	C20001006M160
		D 1111 041 1000 A	E04004000000		R403		Carbon chip 470ohm 1/16W	C20004716M160
REM900	960 0181 100	Remocon sensor NJL64H380A	E940643800000	1	R404		Carbon chip 100kohm 1/16W	C20001046M160
		- (-0	0000010000010	Lill	R405	960 9003 807		C060010163050
RLY600	963 0071 303	Relay (RSB24S)	G680240202010	1	R406	963 9004 342		C20004726M160
			0.1000000000000000000000000000000000000		R407	963 9004 339		C20004716M160
SW900-923			G180000270010	24	R408	963 9004 119	· ·	C20001226M160
SW924	960 0181 207	Rotary encoder (EC16B2420431)	G121162420400	1	R409	963 9004 339	·	C20004716M160
					R411		Carbon chip 68kohm 1/16W	C20006836M160
XTAL900	960 0112 001	Ceramic resonator	CST10.0MGW-TF01	1	R412	963 9004 834	·	C20005626M160
			E830100000050		R413	960 9006 503		C060022163050
					R414	963 9004 216		C20002226M160
*	960 0184 408	FLT holder	4320200026000	1	R415	963 9003 398		C20001026M160
					R416		Metal film 680ohm 1/4W (NB)	C060068163050
					R417	963 9003 398	· ·	C20001026M160
					R418	963 9004 274	· ·	C20003336M160
					R420	963 9004 847	· ·	C20003326M160
	[				R426,427	963 9004 070	Carbon chip 10kohm 1/16W	C20001036M160

Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks
R428	963 9004 847	Carbon chip 3.3kohm 1/16W	C20003326M160	C422	963 9004 656	Ceramic chip 470pF/50V	D010471167160
R429	963 9004 850	Carbon chip 82ohm 1/16W	C20008206M160	C423,424	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160
R430	963 9003 807	Metal film 100ohm 1/4W (NB)	C060010163050	C425		Electrolytic 4.7uF/50V	D0404R7087100
R431	963 9004 371	Carbon chip 5.1kohm 1/16W	C20005126M160	C426		Electrolytic 3.3uF/50V	D0403R3087100
R432	963 9004 070	Carbon chip 10kohm 1/16W	C20001036M160	C427		Electrolytic 4.7uF/50V	D0404R7087100
R434	963 9003 807	Metal film 100ohm 1/4W (NB)	C060010163050	C428	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160
R435	963 9004 847	Carbon chip 3.3kohm 1/16W	C20003326M160	C430	963 0021 900	Mylar film 0.047uF/100V	D02047306C060
R437-439	963 9004 083	Carbon chip 100kohm 1/16W	C20001046M160	C431	963 9004 627	Ceramic chip 33pF/50V	D010330167160
R440,441	963 9004 863	Carbon chip 120kohm 1/16W	C20001246M160	C432		Electrolytic 47uF/25V	D040470084070
R442,443	963 9004 847	Carbon chip 3.3kohm 1/16W	C20003326M160	C433	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160
R444,445	963 9004 481	Carbon chip 8.2kohm 1/16W	C20008226M160	C434		Electrolytic 1uF/50V	D040010087080
R448	963 9004 216	Carbon chip 2.2kohm 1/16W	C20002226M160	C435,436	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160
R455	963 9004 876	Carbon chip 330ohm 1/16W	C20003316M160	C437		Electrolytic 47uF/25V	D040470084070
R456	963 9003 385	Carbon chip 100ohm 1/16W	C20001016M160	C438		Electrolytic 1uF/50V	D040010087080
R458,459	963 9004 342	Carbon chip 4.7kohm 1/16W	C20004726M160	C439		Electrolytic 0.22uF/50V	D040R22087100
R460-464	963 9004 083	Carbon chip 100kohm 1/16W	C20001046M160	C440,441		Electrolytic 1uF/50V	D040010087080
R465-469	963 9004 203	Carbon chip 220ohm 1/16W	C20002216M160	C442		Electrolytic 2.2uF/50V	D0402R2087100
R470	963 9003 398	Carbon chip 1kohm 1/16W	C20001026M160	C443		Electrolytic 10uF/50V	D040100087050
R471VT	963 9004 203	Carbon chip 220ohm 1/16W	C20002216M160	C444		Electrolytic 4.7uF/50V	D0404R7087100
R473	963 9003 372	Carbon chip 0ohm 1/16W	C20000006M160	C445		Electrolytic 10uF/50V	D040100087050
R475	963 9004 122	Carbon chip 12kohm 1/16W	C20001236M160	C446,447	963 9005 053	Ceramic 270pF/50V	D004271277050
R476	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C448,449	963 9004 960	Ceramic 470pF/50V	D004471067060
R478	963 9004 070	Carbon chip 10kohm 1/16W	C20001036M160	C450,451	000 0004 000	Electrolytic 10uF/50V	D040100087050
R479	963 9004 083	Carbon chip 100kohm 1/16W	C20001036M160	C452	963 9004 575	•	D010101167160
R491	963 9004 229	Carbon chip 22kohm 1/16W	C20007040M160	C453	963 9004 614	Ceramic chip 27pF/50V	D010270167160
11431	300 3004 223	Calbon Chip 22ROTHT 1/1044	O20002230W100	C454,455	963 9004 575	Ceramic chip 100pF/50V	D010101167160
D1004 1005	963 0048 006	Metal film 330ohm 2W	C060033166520	C456	963 9004 672	Ceramic chip 680pF/50V	D010681167160
11024,1023	303 0040 000	Wetai Iniii 33001iii 244	0000003100320	C457,458	963 9004 575	Ceramic chip 100pF/50V	D010101167160
VR401	960 0096 606	Semi fixed resistor 20kohm	C541203115000	C459	300 3004 373	Electrolytic 1uF/50V	D040010087080
VR401 VR402	963 0056 205	Semi fixed resistor 50kohm	C541503115000	C461	963 9004 591	Ceramic chip 22pF/50V	D010220167160
VR402 VR403	963 0052 005	Semi fixed resistor 200kohm	C541204115000	C463	963 9004 782	Mylar film 0.056uF/100V	D02056306C060
V n400	903 0032 003	Semi lixeu resistor zookomin	C341204113000	C463	963 9004 973	Ceramic 3pF/50V	D000030007050
				C465-469	300 3004 370	Electrolytic 10uF/50V	D040100087050
CAPACIT	ORS GROUP	•	•	C403-409		Electrolytic 1uF/50V	D040010087080
C401,402	963 9004 685	Ceramic chip 1000pF/50V	D011102777160	C470		Electrolytic 1uF/50V	D040010087080
C403	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160	C471VT	963 9004 753	Ceramic chip 0.047uF/50V	D011473597160
C404	963 9004 892	Ceramic 2pF/50V	D000020007050	C472V1	903 9004 733	Ceramic crip 0.047ur/50V	D011473397100
C405	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160	0504 500		Floatrolatio 4.7: F/FOV	D0404D7007400
C406	963 9004 902	Ceramic chip 18pF/50V	D010180167160	C501-503		Electrolytic 4.7uF/50V	D0404R7087100
C408	960 9004 709	Ceramic 6pF/50V	D000060007050	C504,505		Electrolytic 470uF/10V	D040471082060
C409	963 9004 520	Ceramic 100pF/50V	D005101177520	C506-508		Electrolytic 10uF/50V	D040100087050
C410	963 9004 915	Ceramic 470pF/50V	D005471277520	C509		Electrolytic 100uF/10V	D040101082060
C411	963 9004 685	Ceramic chip 1000pF/50V	D011102777160	C510		Electrolytic 470uF/10V	D040471082060
C412	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160	C511		Electrolytic 1uF/50V	D040010087080
C413	963 9004 575	Ceramic chip 100pF/50V	D010101167160	C512	963 9004 517	Ceramic 0.022uF/50V	D004223597050
C414	-30 000 1010	Electrolytic 2.2uF/50V	D0402R2087100	C513		Electrolytic 47uF/25V	D040470084070
C415		Electrolytic 47uF/25V	D040470084070	C514	960 9008 653	Mylar film 0.012uF/100V	D02012306C060
C416	·	Electrolytic 10uF/50V	D040100087050	C515		Electrolytic 1uF/50V	D040010087080
C417	.	Electrolytic 100uF/16V	D040101083100	C516	960 9008 653		D02012306C060
C417	963 9004 698	Ceramic chip 0.01uF/50V	D011103777160	C517	963 9005 118	Ceramic 100pF/50V	D004101067060
	303 3004 038	· ·		C518	963 9004 504	Ceramic 0.01uF/50V	D004103097060
C419	062 0004 504	Electrolytic 10uF/50V	D040100087050	C519		Electrolytic 1uF/50V	D040010087080
C420	963 9004 591	Ceramic chip 22pF/50V	D010220167160	C520		Electrolytic 470uF/10V	D040471082060
C421	963 9004 928	Ceramic chip 24pF/50V	D010240167200				

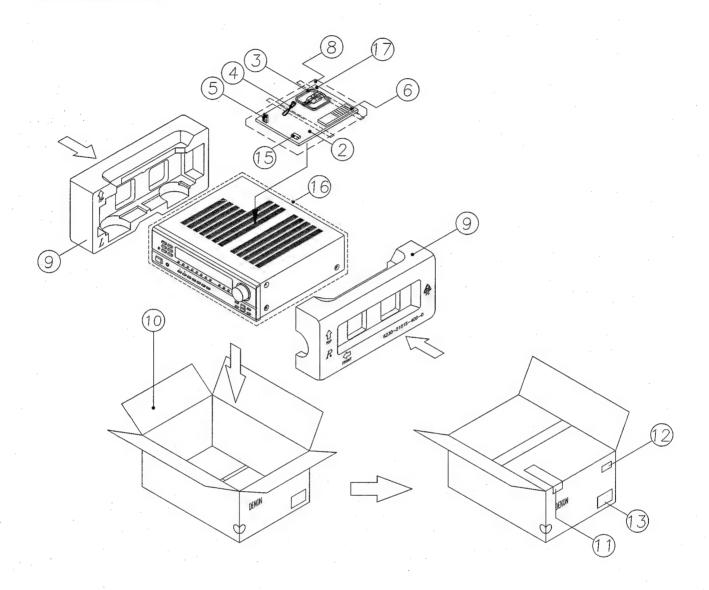
Ref. No.	Part No.	Part Name	Remark	S	Ref. No.	Part No.	Part Name	Remarks	Q'ty
C521	963 9004 504	Ceramic 0.01uF/50V	D004103097060	)	SW935	963 0045 708	Tact switch	G180000270010	1
C550		Electrolytic 0.1uF/50V	D040R10087070	)	SW937,938	963 0045 708	Tact switch	G180000270010	2
C551		Electrolytic 100uF/25V	D040101084060	)					
					T401	960 0186 600	MW IFT (PCFMAF-270)	D950500200000	1
C928,929	963 9004 533	Ceramic 1000pF/50V	D005102177530		T402	960 0007 349	FM DET trans.	D951561100000	1
C930	960 9003 108	Ceramic 0.022uF/25V	D005223594520	)	T403	960 0007 352	FM DET trans.	D951561200000	1
C931		Electrolytic 1uF/50V	D040010087080	) .					
					X401	960 0187 405	Crystal 7.2MHz	E8007R2000071	1
OTHER R	ARTS GROU	ID		Q'ty	X402	963 0043 302	Ceramic resonator	CSB456F11	1
CF401,402	960 0187 104		SFE10.7MA8	2				E830456000050	
CF401,402	900 0107 104	Ceramic inter	E430107000140						
CF403	960 0187 609	Ceramic resonator	BFU450C	1	★	963 0054 003		3070210056000	1
01403	300 0 107 003	Ceramic resonator	E830450000070		*	963 0088 406	Earth plate C	4470210206000	1
			2000430000070			960 0184 000	Screw bracket	4010210196000	2
CN602	960 0129 706	13P connector base	L101352371310	1					
CN603	963 0085 409	10P connector base	L101100031010						
CN605	963 0086 709		L101100031110	1					
CN606,607	963 0086 709	· ·	L101100031110	1			·		
CN608	963 0085 409	10P connector base	L101100031010						
CN609	963 0086 709	11P connector base	L101100031110						
CN902	963 0049 908		L101220030010		-				
CN907		3P connector cord (L=400)	L000401030020		11				
		,							
CP900	963 0086 000	2P connector cord (L=80)	L000800020060	1					
CP906	963 0048 909	3P connector base	L101220030000	1					
									ļ.
FE401	960 0187 706	Tuner pack	E900401010020	1					
		•							
G401		1P Wire (L=80)	8410800010010						
G901		1P Wire (L=80)	8410800010010	1					
HAJACK900	960 0187 502	Headphone jack (D6.5)	G402038400031	1					
J401-404	963 9003 369	Carbon chip 0ohm 1/8W	C200000061300	4					
J407	963 9003 369	Carbon chip 0ohm 1/8W	C200000061300						
J409		Carbon chip 0ohm 1/8W	C200000061300						
0403	303 3003 303	Carbon criip conin 170**	0200000001000	1 '					
JACK401 402	960 0188 200	4P nin jack	G602040610000	1					
JACK403	960 0194 508		G600010003020				. •	- N	
JACK404		3P antenna terminal	G593021068010						
JACK501,502	960 0194 605		G601020163010						
JACK503	960 0188 404		G606030164020						
JACK504	963 0071 002		G401065020000						
	100 30. 1 002								
L401,402	963 0052 102	Inductor 1uH	D3301R0001020	2					
L403		MW IFT (RBW07VB-K5025)	D950500500010						
		, , , , , , , , , , , , , , , , , , , ,							
SW926	963 0045 708	Tact switch	G180000270010	1					
SW928	963 0045 708	· ·	G180000270010	1 .					1
SW929	960 0176 209		G000122000010						
SW931	963 0045 708		G180000270010						
SW933	963 0045 708		G180000270010	1					



# PARTS LIST OF EXPLODED VIEW

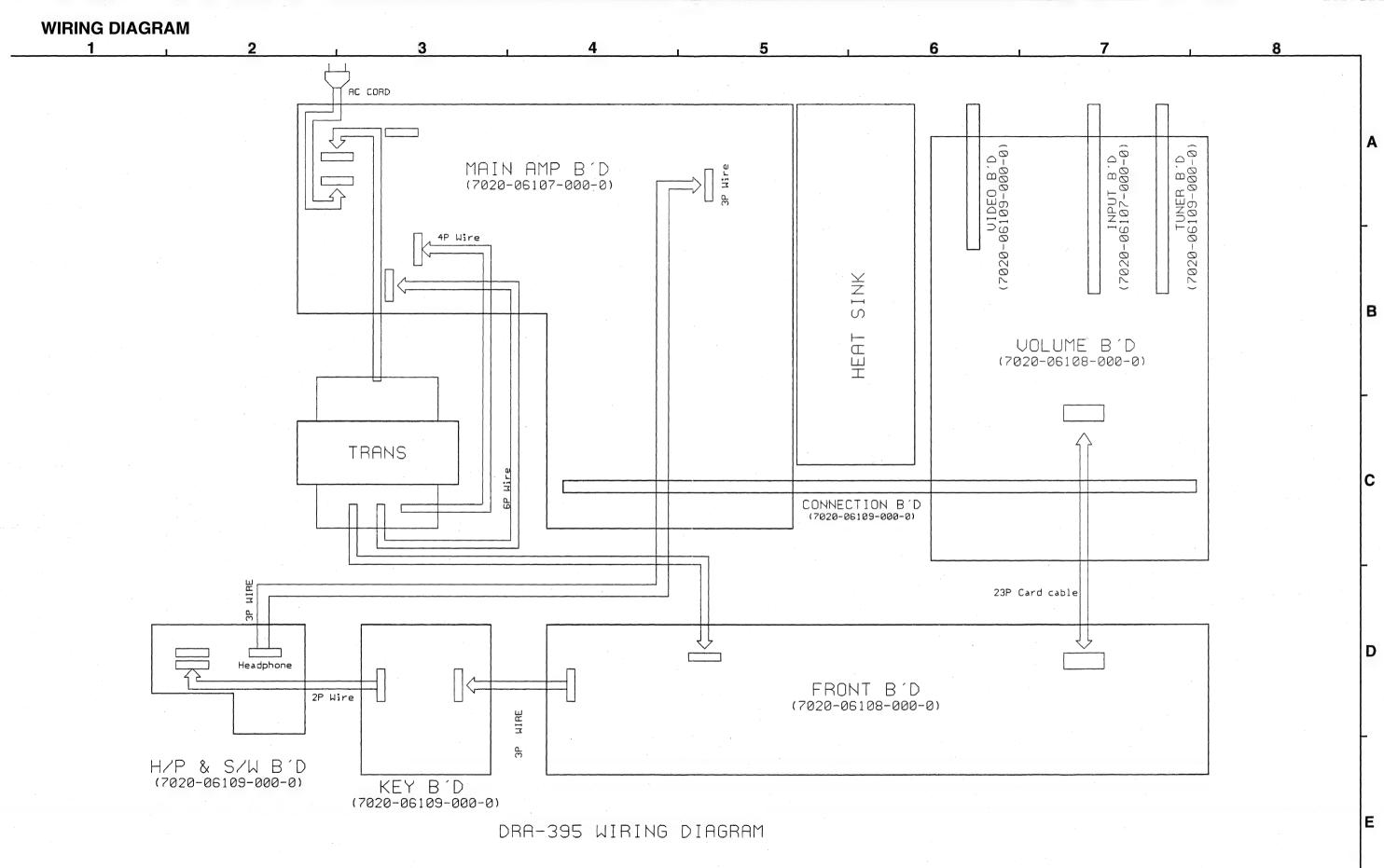
Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. N	0.	Part No.	Part Name	Remarks	Q't
	963 0080 200	Main P.W.B. unit Ass'y	7025HK0010010	1		31	963 0074 009	8P speaker terminal	JACK102	1
40		Main P.W.B. unit							G61408103610A	
44		Input P.W.B. unit		-		32	963 0076 405	Back panel	3207210766500	1
					À	33	960 0192 403	Cord bush	4380210002000	1
	963 0080 307	Front P.W.B. unit Ass'y	7025HK0010011	1	Δ	34	960 0166 400	AC cord	L068020030010	1
<b>—</b> 37		Front P.W.B. unit				35	960 0176 209	Push switch	SW929	1
L 42		Volume P.W.B. unit							G000122000010	
				.		36	960 0187 502	Headphone jack (D6.5)	G402038400031	1
	963 0080 404	Tuner P.W.B. unit Ass'y	7025HK0010012	1		46	963 0072 205	Trans bracket	4010210466001	1
38		Switch P.W.B. unit				47	963 0053 017	Top cover	3000210096001	1
39		Power SW/HP P.W.B. unit				48	960 0187 900	Posistor P43T7D330BW16	F320161001020	1
41	,	Connector P.W.B. unit				49		Heat sink	2120043538050	.
43	,	Tuner P.W.B. unit				50	963 0072 302	Rubber cushion	4050210165000	1 2
L 45		Video P.W.B. unit	•			51		Shield cover	3070210056000	.
10		Tidoo i iiiiii				52		Earth plate C	4470210206000	
1	963 0076 201	Front panel	3067210651200Z	1		53	960 0090 009	the state of the s	3070210146000	.
2	960 0185 009	Power button	5090210201000Z			54	960 0183 807	Terminal	3790000090000	
3	963 0076 609	Display window	5077210262030		<b>★</b>	55	963 0089 104		1210210235000	
4	963 0070 003	Volume knob	5087210191010Z		<b>1</b>	56		Wire clamper	4330040343010	
5	963 0053 703	5key button	5097210471000Z			57	963 0054 207	Fuse caution label	5527042410020	
6	963 0053 705	3key button	5090210511000Z		*	58	963 0089 007	FFC cable	CP901	
7	963 0033 600	7(A)key button	5090210491201Z		*	50	303 0003 007	I I O Cable	L301171230010	
	963 0053 509	, , ,	50902104912012 5090210501000Z						2301171230010	
8		8key button								
9	963 0076 803	7(B)key button	5090211331000Z	2	SCRE	WS				
10	960 0191 417	LED lens	3710210043001	1		Α	963 0018 007	Screw 3×8 (B)-Z	B020030081B10	4
11	963 0051 006		3720210116000			В		Screw 3×8 (B) W-B	1500001456020	١.
12	960 0198 229	Main chassis	3200210146301	1 1		С		Screw 3×10 (B)-Z	B020030101B10	
13	960 0183 904	Foot Ass'y	400802006101C	4		D	1	Screw 3×10 (B)-B	B020030103B11	2
14	960 0184 107	Support bracket	4010210206000	1		Ε	963 9004 009	Screw 3×14 (P) SW W-Z	B018230141H10	1,
-15	960 0003 301	P.W.B. support	4070001601010	2		F		Screw 3×17 (B)-Z	B020030171B10	1 :
16	963 0051 103	Card spacer	4300210062000	2		G		Screw 4×8 (B)-B	1500040083B10	١,
. 17	960 0180 509	FLT (16-ST-42GNK)	FL900	1		Н		Screw 4×8 (P) SW W-Z	B028940081B10	
			K530164200010			.1		Screw 4×6 (S)-Z	B020740061B10	
18	960 0181 100	Remocon sensor NJL64H380A	REM900	1		K		Screw 3×8 (B) W-Z	1500001206010	L
			E940643800000			L		Screw 3×8 (B) W-Z	1500001456010	'
19	960 0197 204	LED HL50RDRF4T	LED900-904	5		_	300 3000 420	00:0W 0×0 (b) W-2	1000001400010	ŀ
			K500052015010						-	1
20	960 0184 408		4320200026000	1					-	
21	960 0181 207	Rotary encoder (EC16B2420431)	SW924	1						
			G121162420400							
22	_	Heat sink (main)	2120210298000Z	1						
23	960 0184 204	Heat sink bracket B	4010210386000	1						
24	960 0184 301	Heat sink bracket F	4010210396000	1			1 .		•	
25	963 0044 107	Transistor 2SB1560Y	Q113,114	2						
			J5011560Y0000					4		
26	963 0044 204	Transistor 2SD2390Y	Q111,112	2						
			J5032390Y0000							
27	963 0058 106	Transistor 2SD947F	Q109,110	2						
			J503947F00000							
28	963 0080 501	Power trans.	8200858680020	1						
29	I	Screw bracket	4010210196000	2						
30	960 0181 508		JACK104	1						
			G435204004010							
	AMAZO DO DE						1	I		1

# **PACKING VIEW**

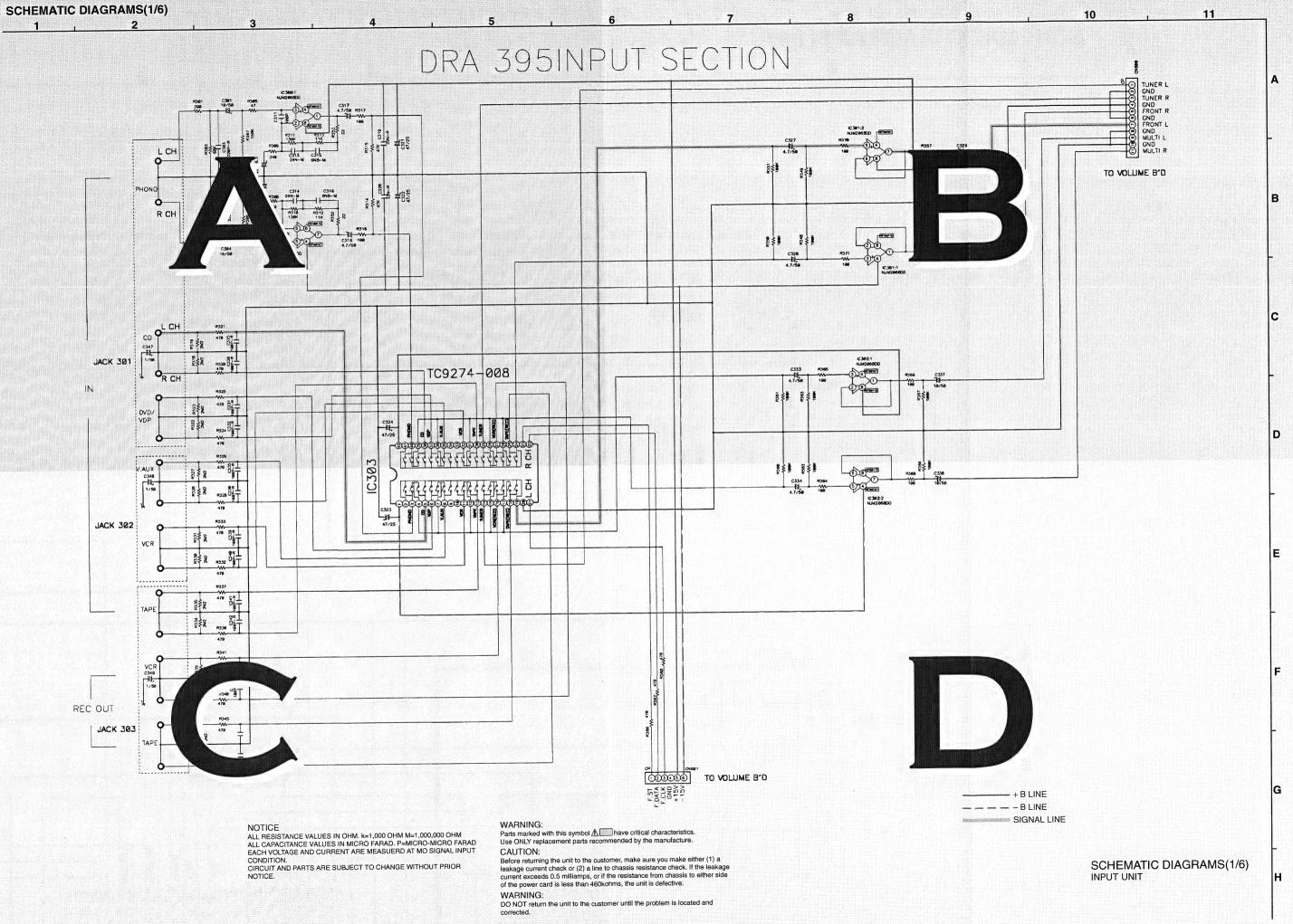


# **PARTS LIST OF PACKING & ACCESSORIES**

Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. No.	Part No.	Part Name	Remarks	Q'ty
2	963 0080 006	Instruction manual	5707210170270	1	10	963 0080 103	Carton case	6007210310030	1
3	963 0052 306	AM loop antenna	E605010090000	1	11		DEL warranty home	5777001610020	1
4	963 0081 102	FM antenna wire	E605010010000	1	12		UPC label	5507002330110	1
5	963 0052 704	FM antenna adapter	L109000180010	1	13	_	Control label	5500014920010	2
6	963 0081 908	Remote control unit RC-894	8300894000010	1	. 15	_	Battery (R03/AAA)	G670011R50000	2
.8	963 0045 106	Poly bag	6330000240000	1	16	960 0185 601	Set poly bag	6330210019000	1
9	963 0193 101	Cushion (L/R)	6230210154001	1	17		S.S. list (EX)	5777001620012	1

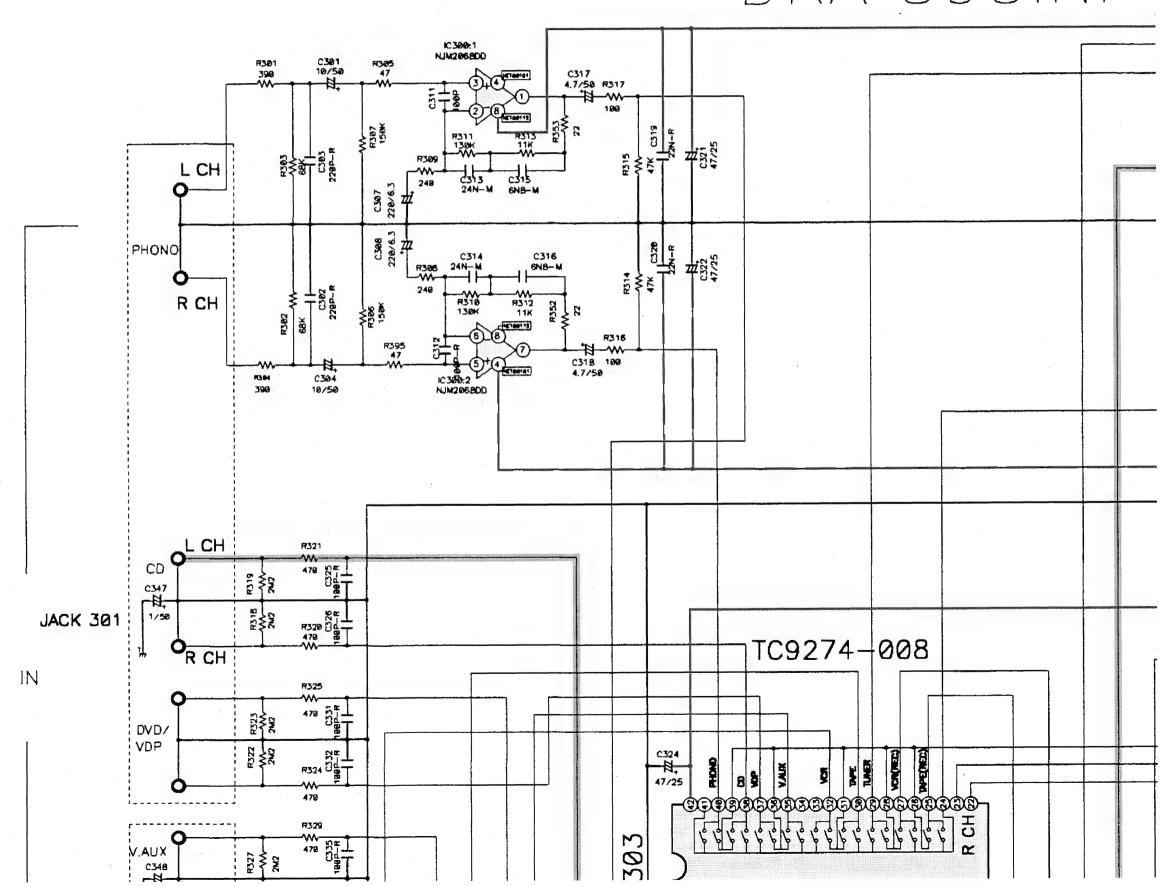


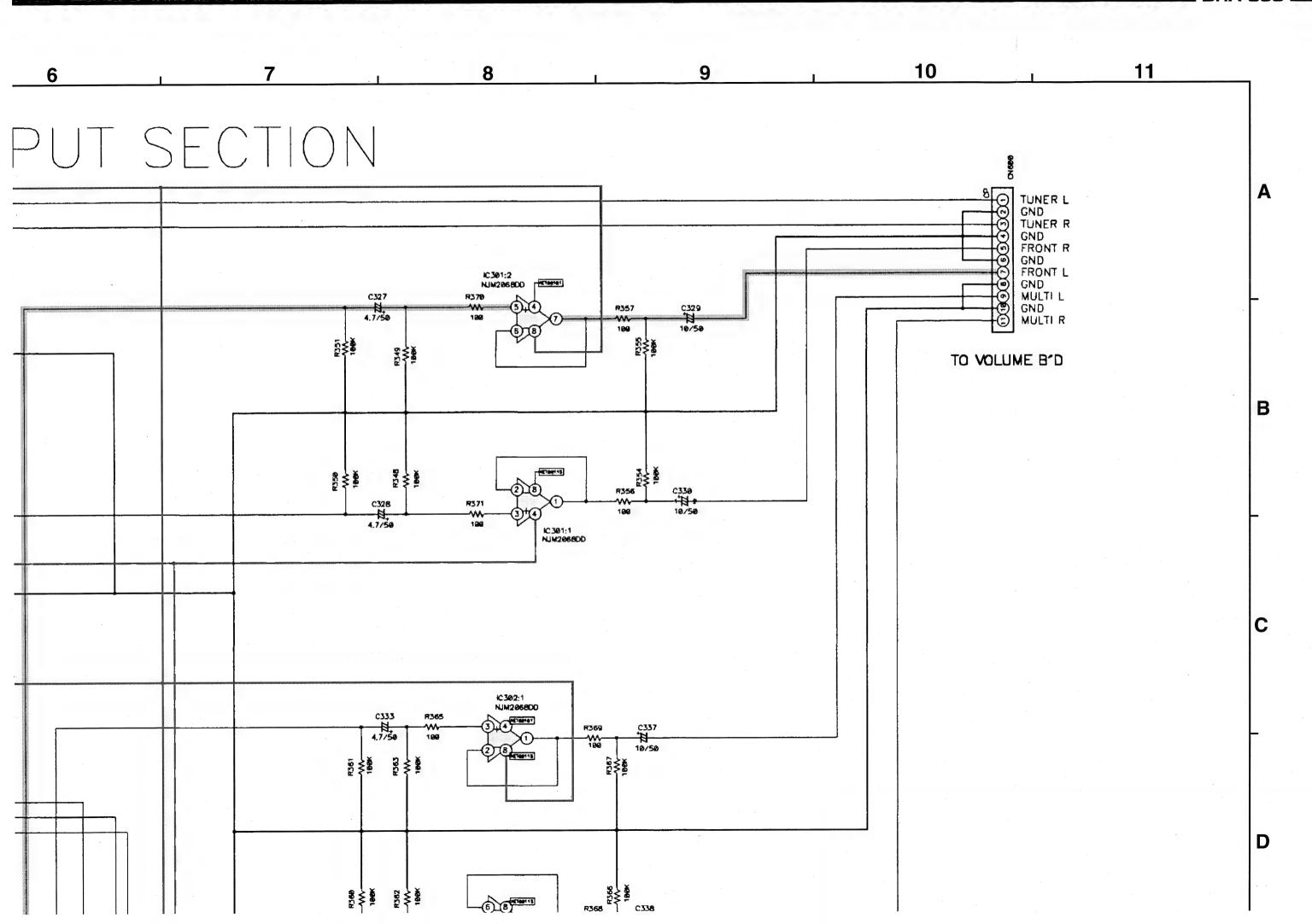
**SCHEMATIC DIAGRAMS(1/6)** 

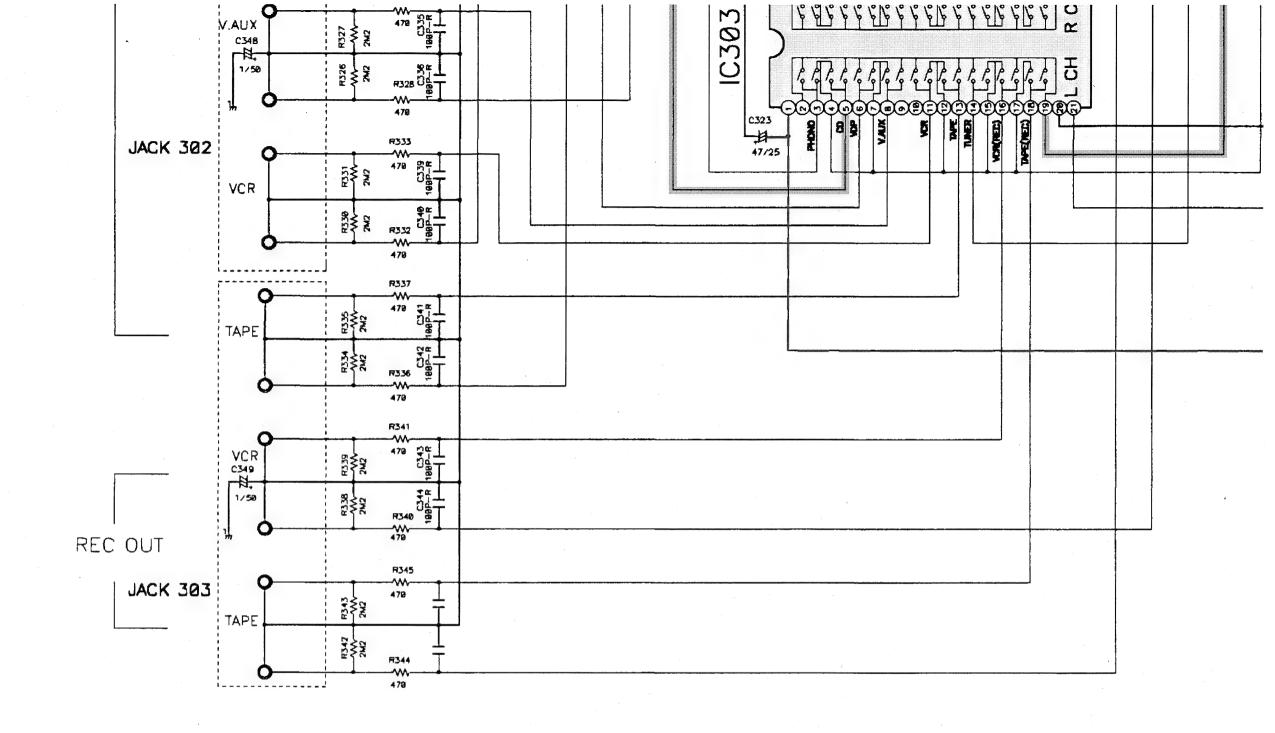


· **I** 

DRA 395INPI







# NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

# **WARNING:**

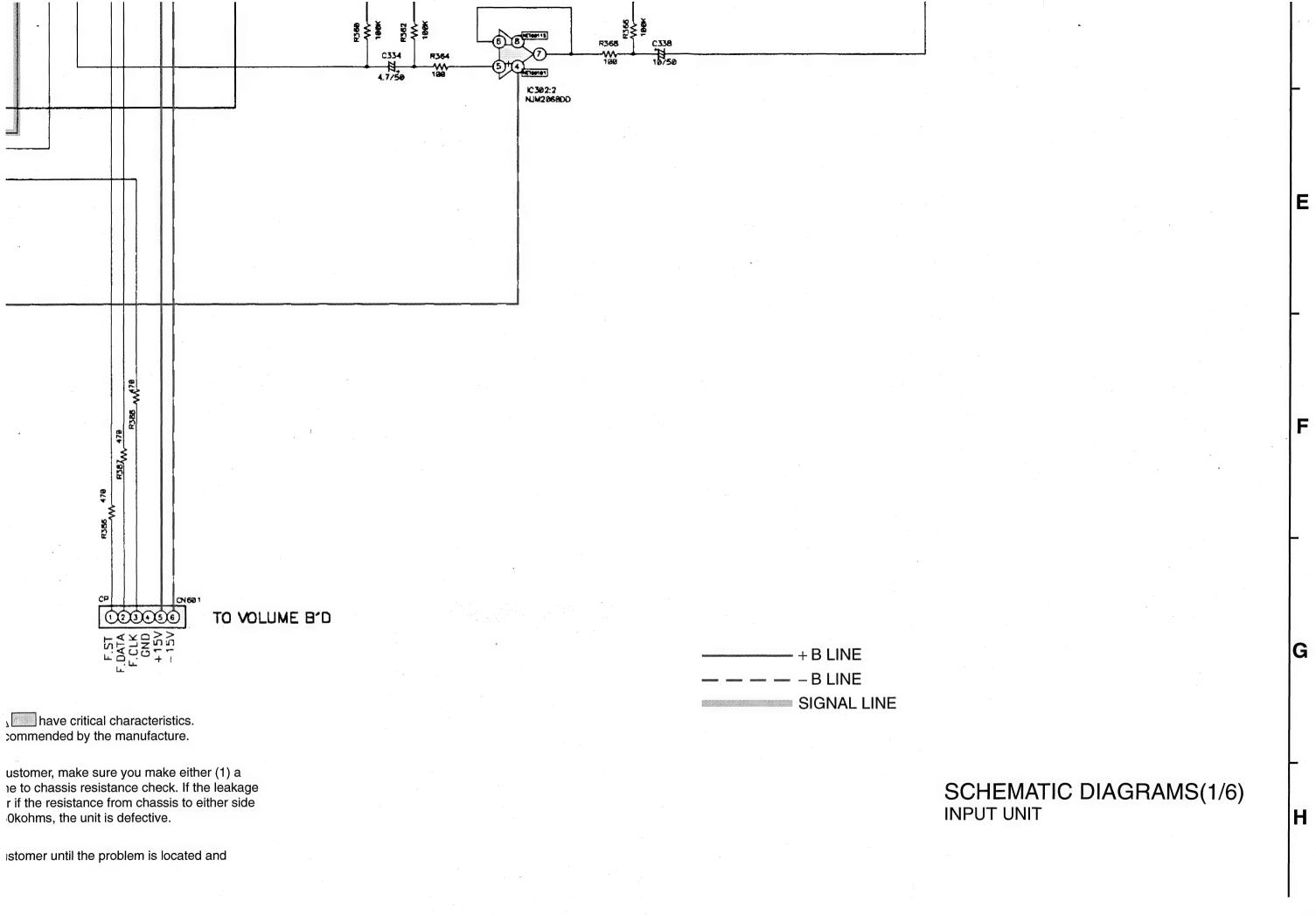
Parts marked with this symbol 🛦 🥅 ha Use ONLY replacement parts recommen

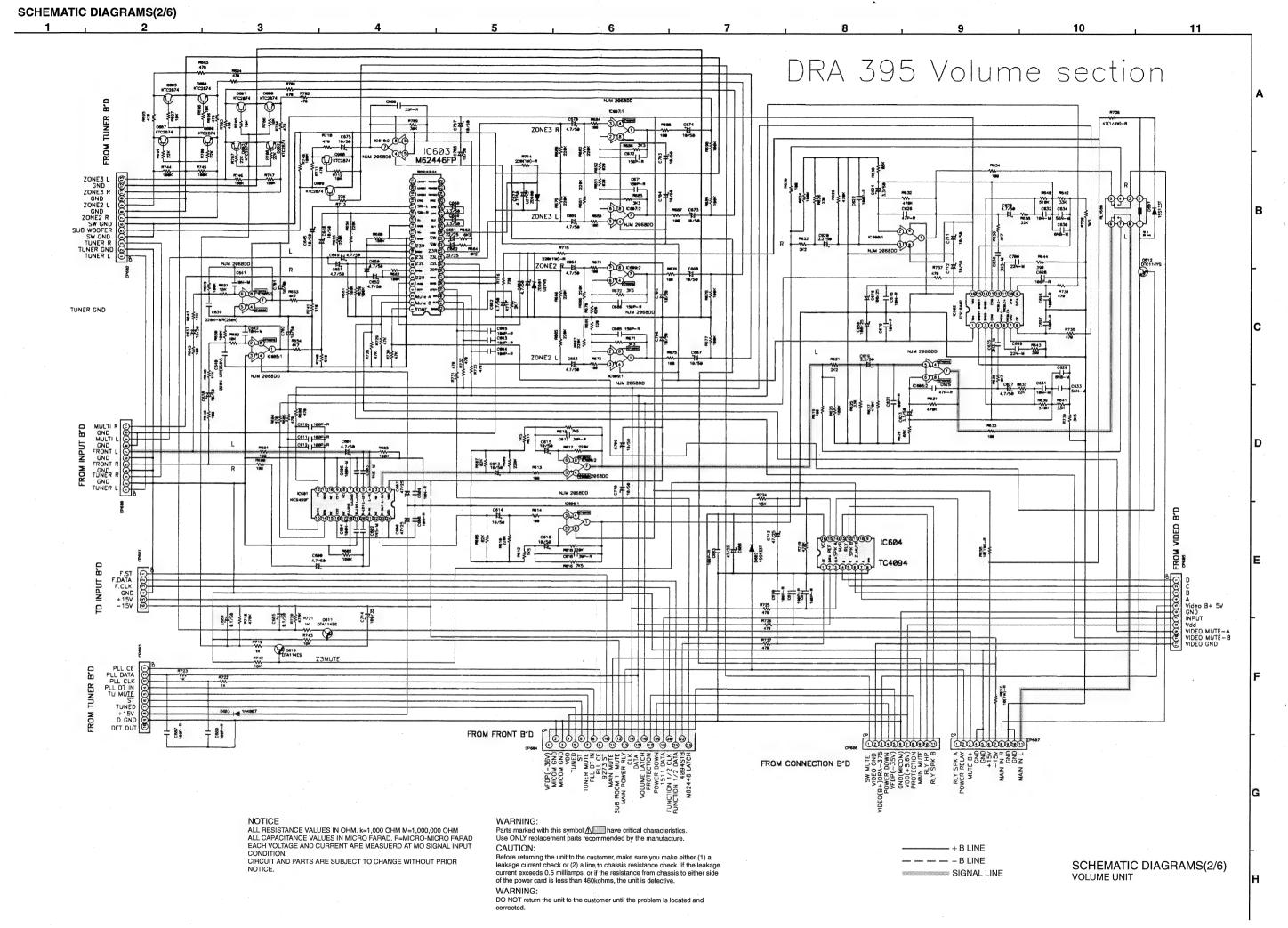
# **CAUTION:**

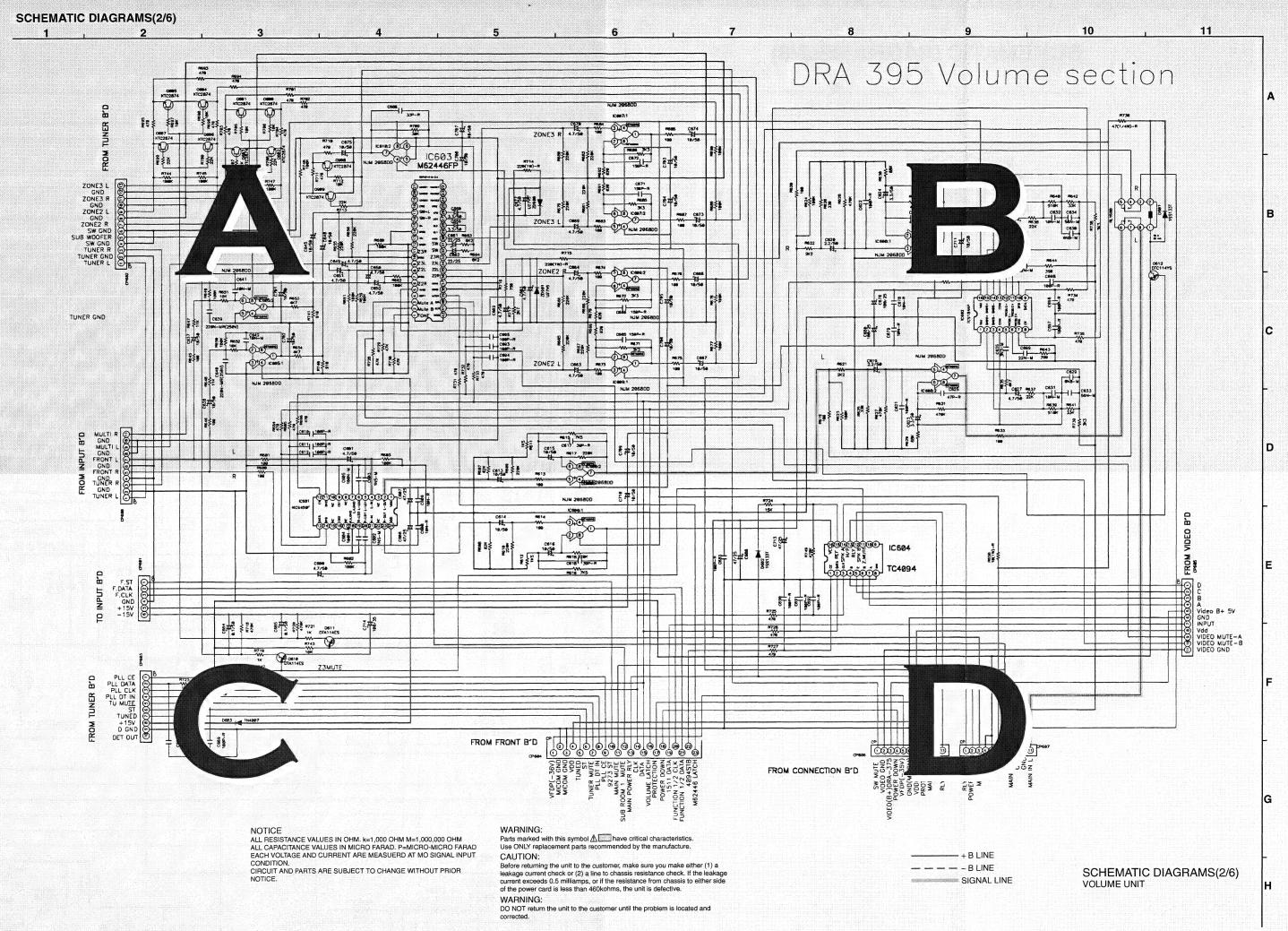
Before returning the unit to the customer leakage current check or (2) a line to che current exceeds 0.5 milliamps, or if the re of the power card is less than 460kohms

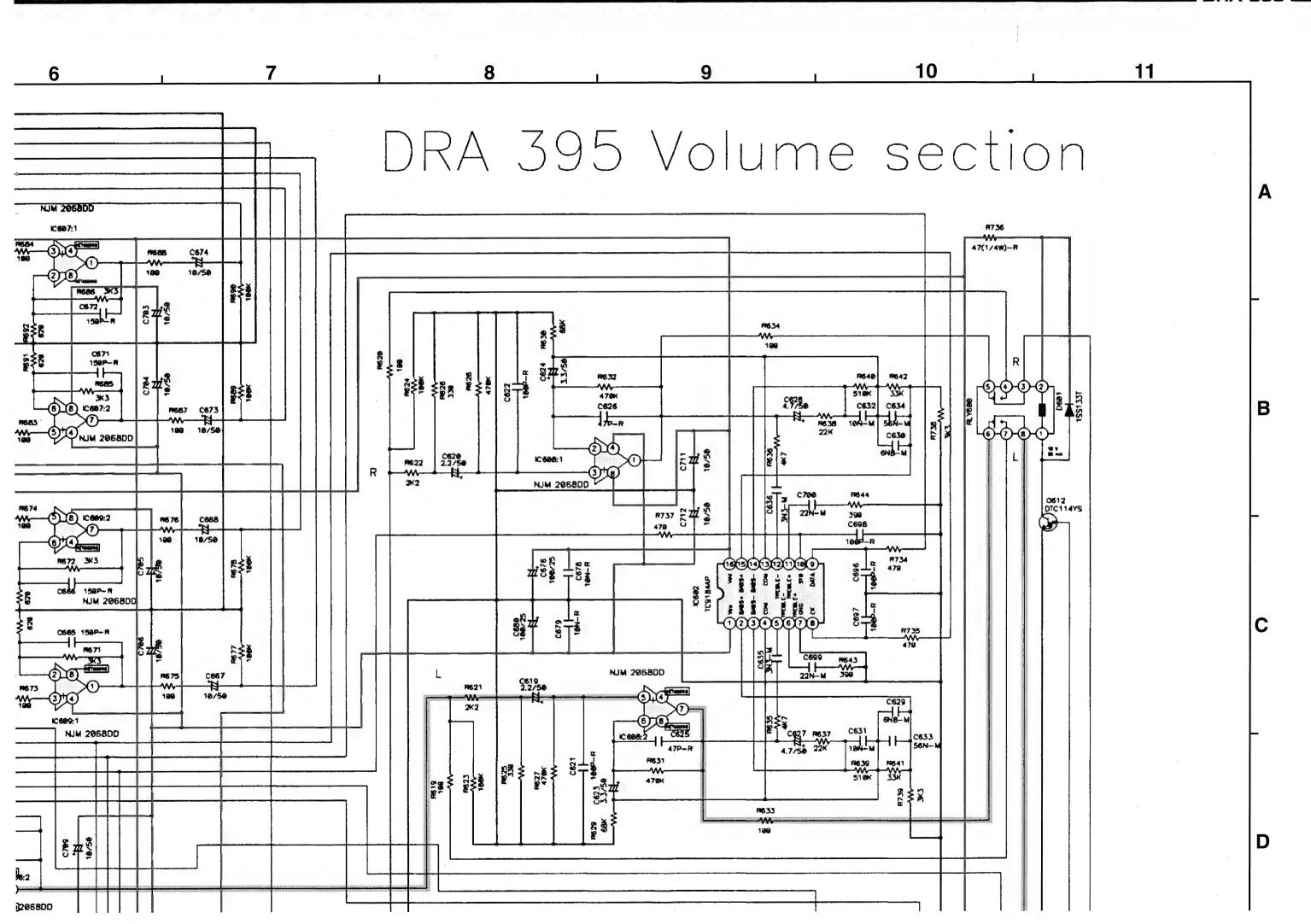
# **WARNING:**

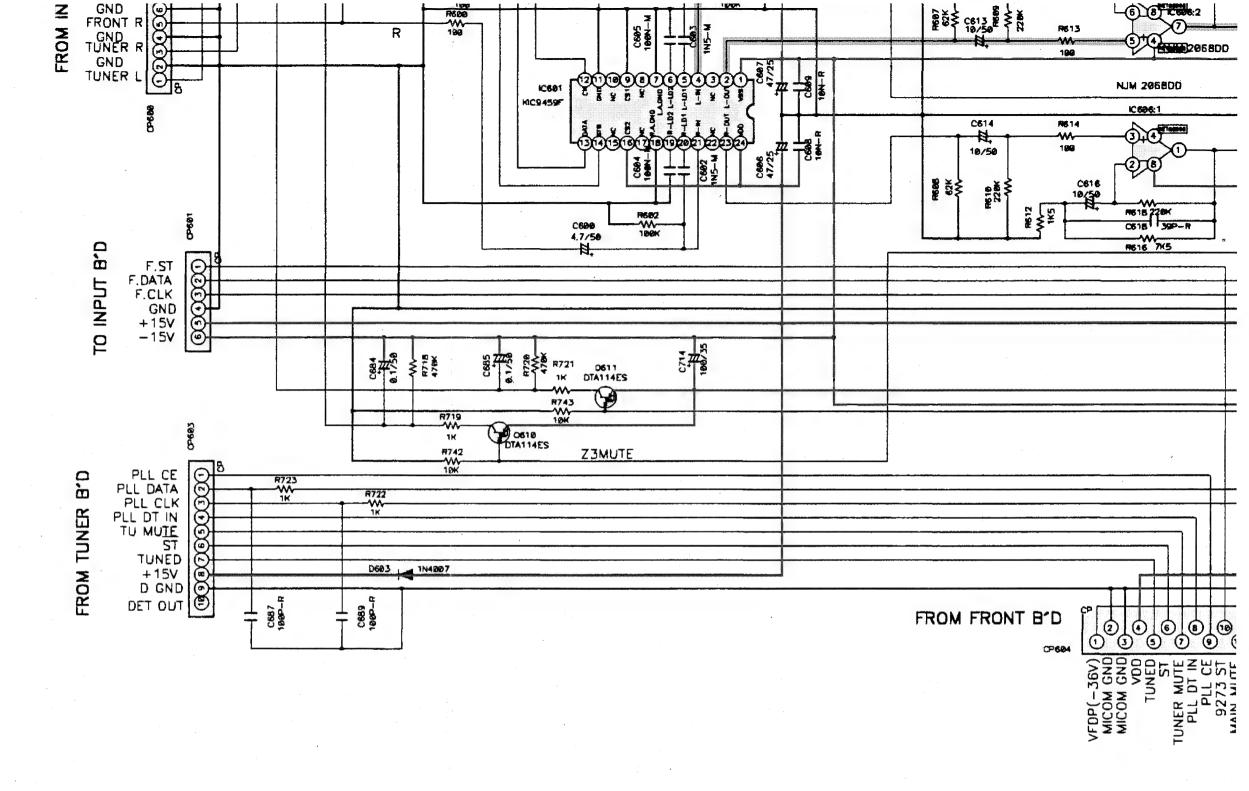
DO NOT return the unit to the customer corrected.











ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

#### **WARNING:**

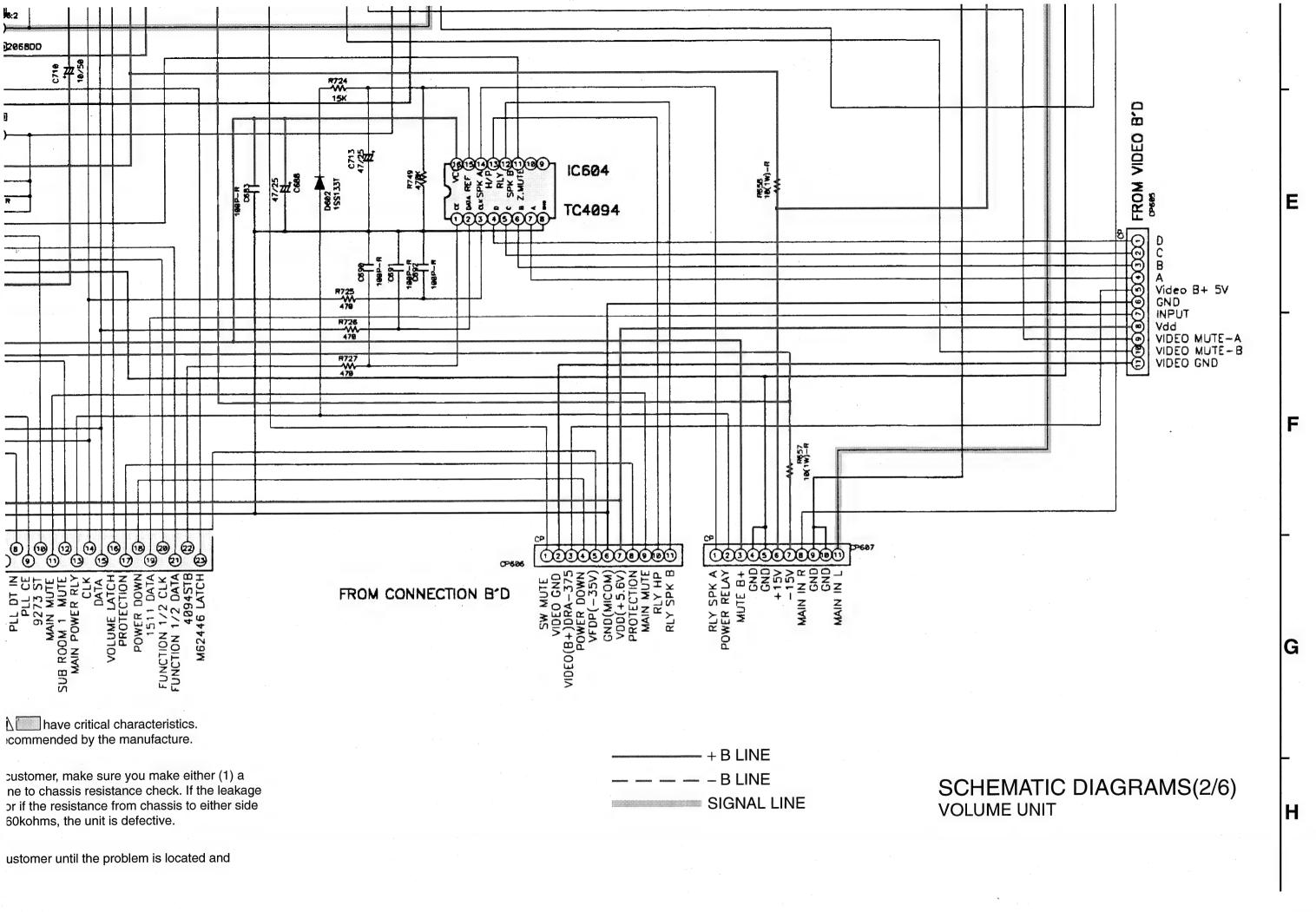
Parts marked with this symbol 1 had been used only replacement parts recommen

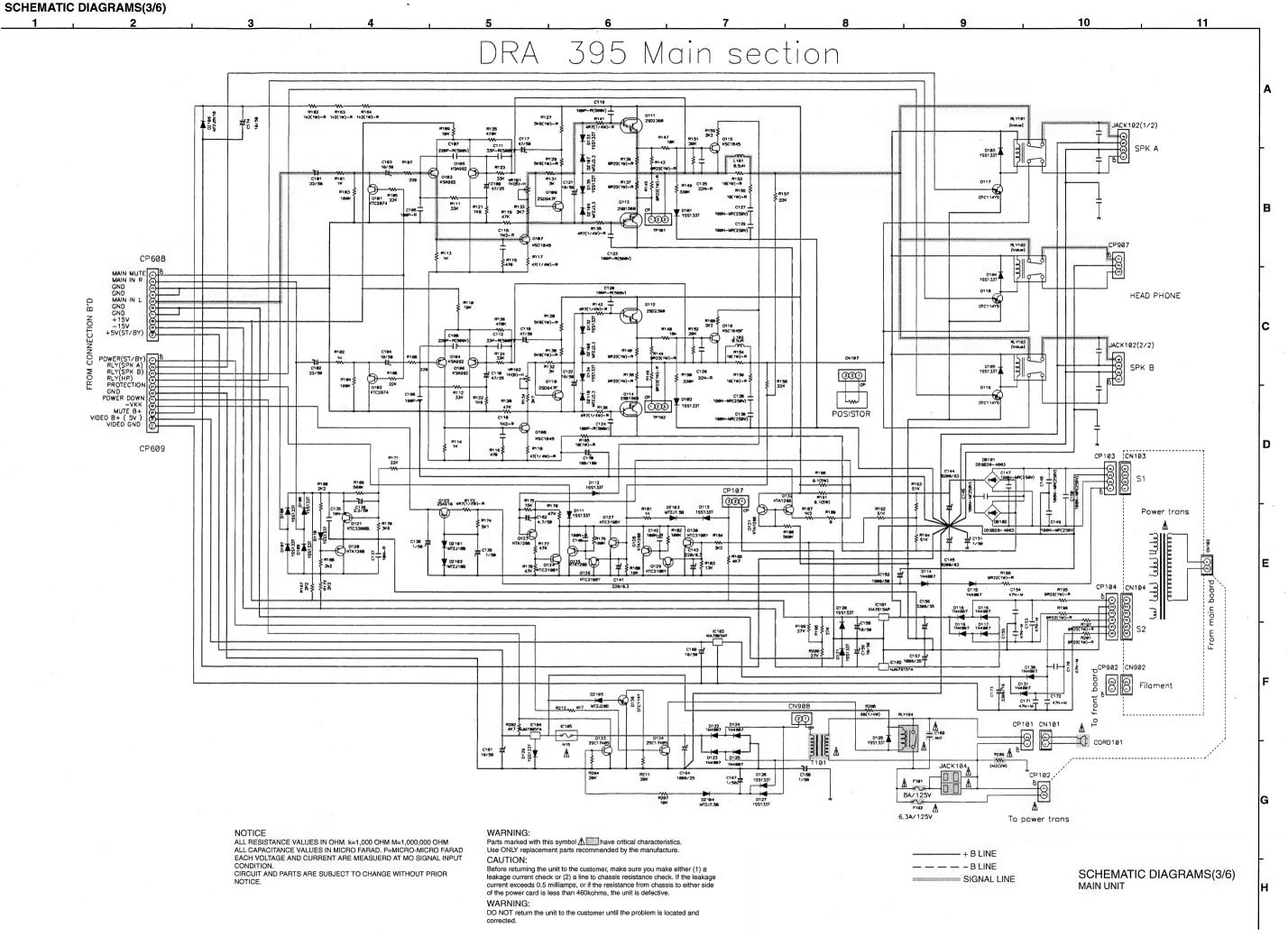
#### **CAUTION:**

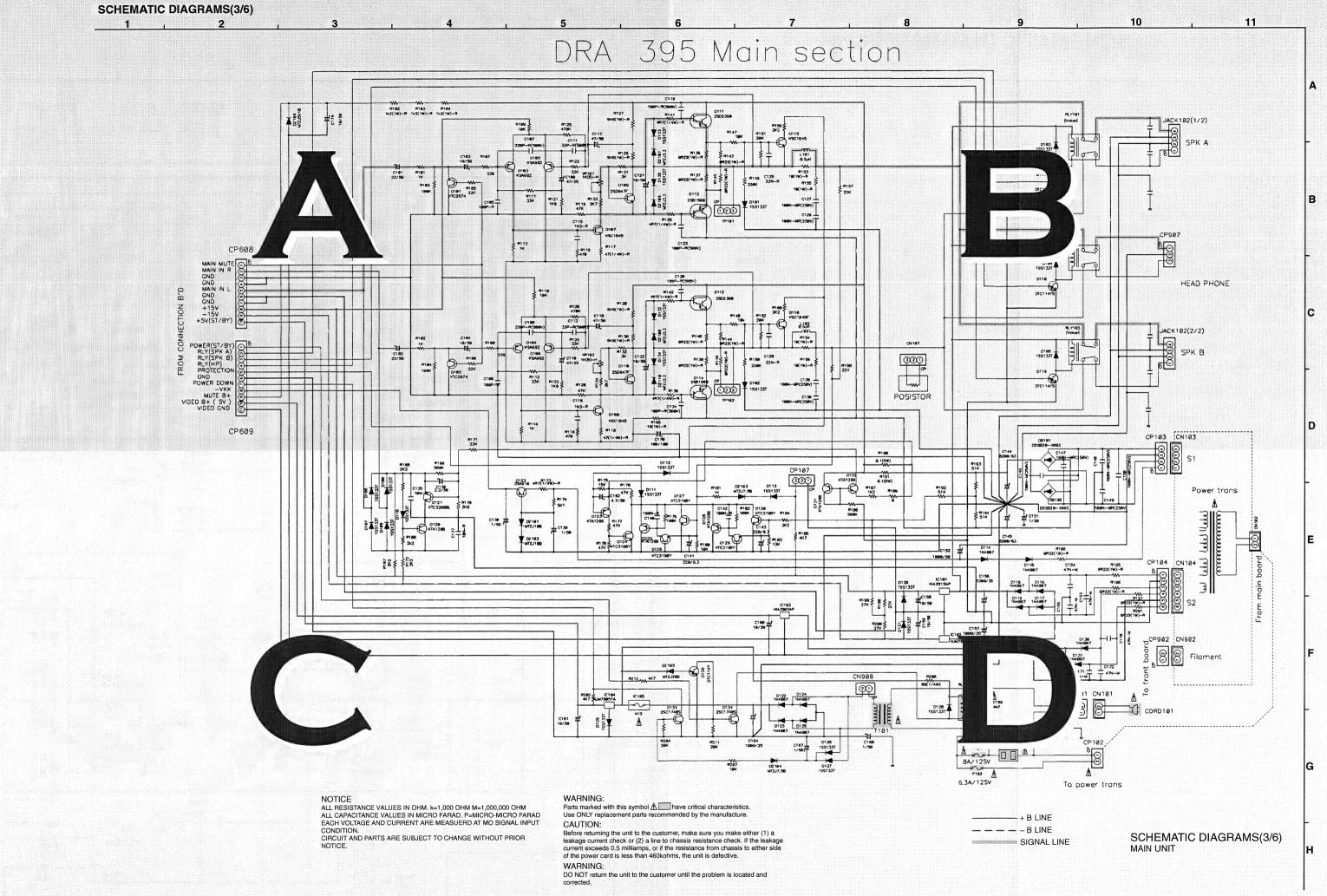
Before returning the unit to the custome leakage current check or (2) a line to ch current exceeds 0.5 milliamps, or if the of the power card is less than 460kohms

#### **WARNING:**

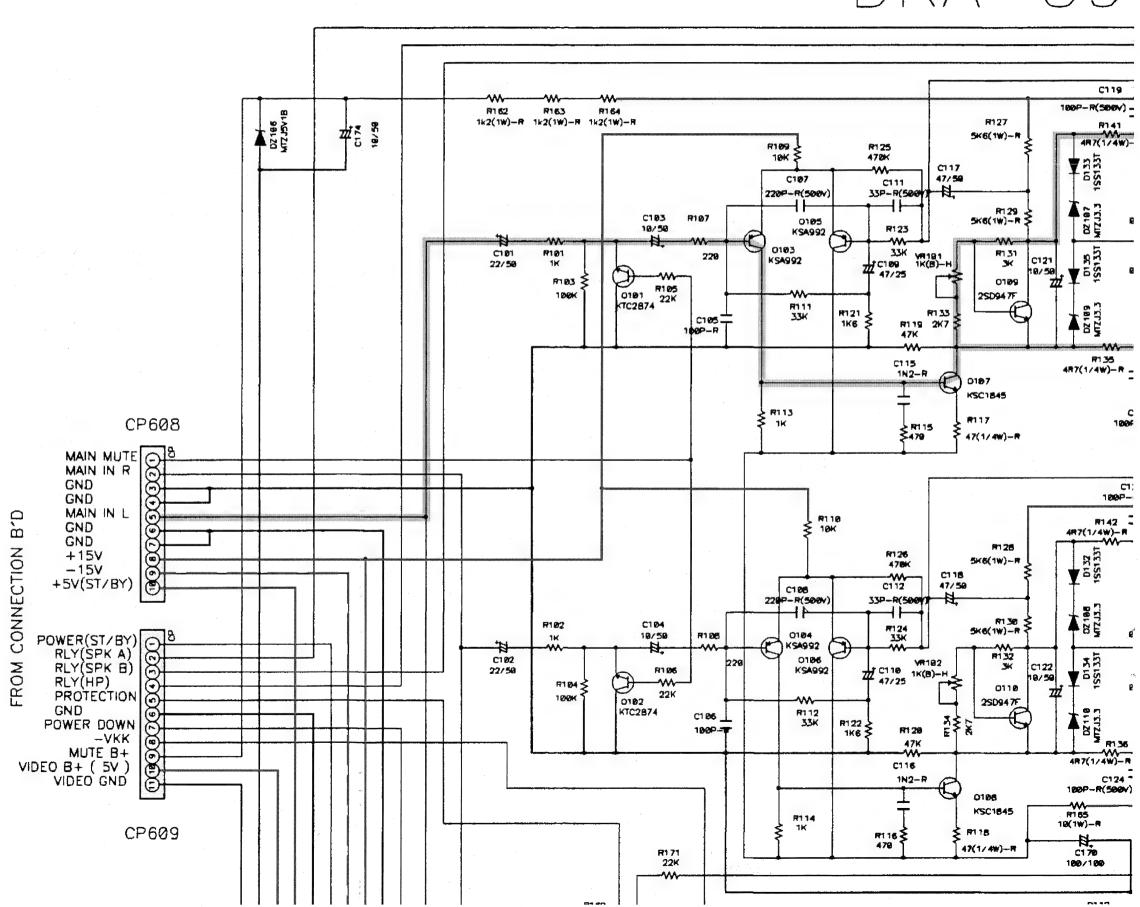
DO NOT return the unit to the customer corrected.

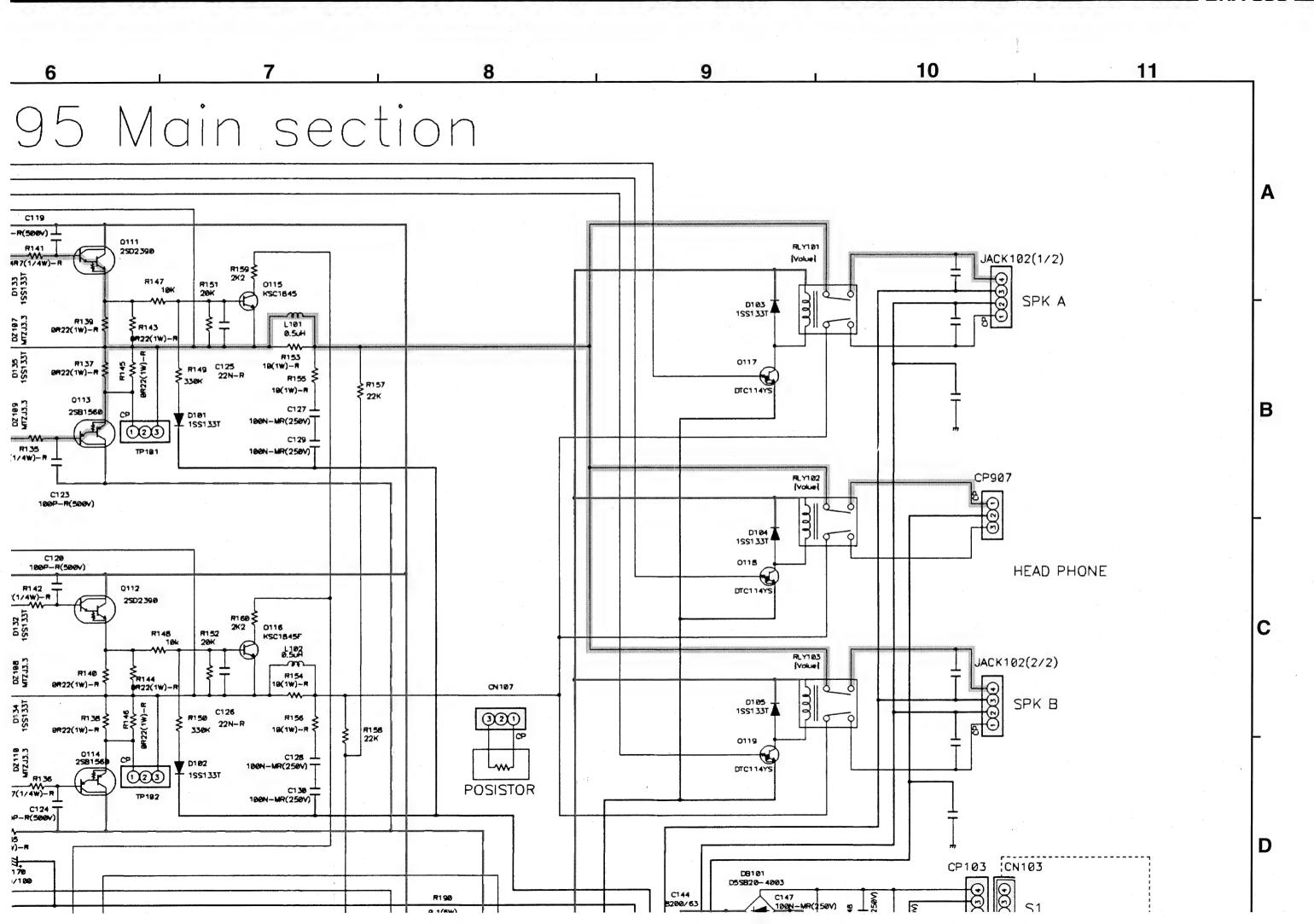












DZ R212  R282  K104  4K7  KLM7505FA  K105	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	569K M C136 2.27/30 O121 KTC3200GL ₹366 O120 KTA1268 ₹1 T 100 T 100	0122 4R7(1/ 25A916 4R7(1/ WA 02181 MTZJ188 DZ192 MTZJ189	R174 SK1	15K R176  15K R176  15K R176  15S133T  100N-R  100N-R
C161 ## 87 55 # A \$				F282 4K7	F212 M4K7 M1

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

#### **WARNING:**

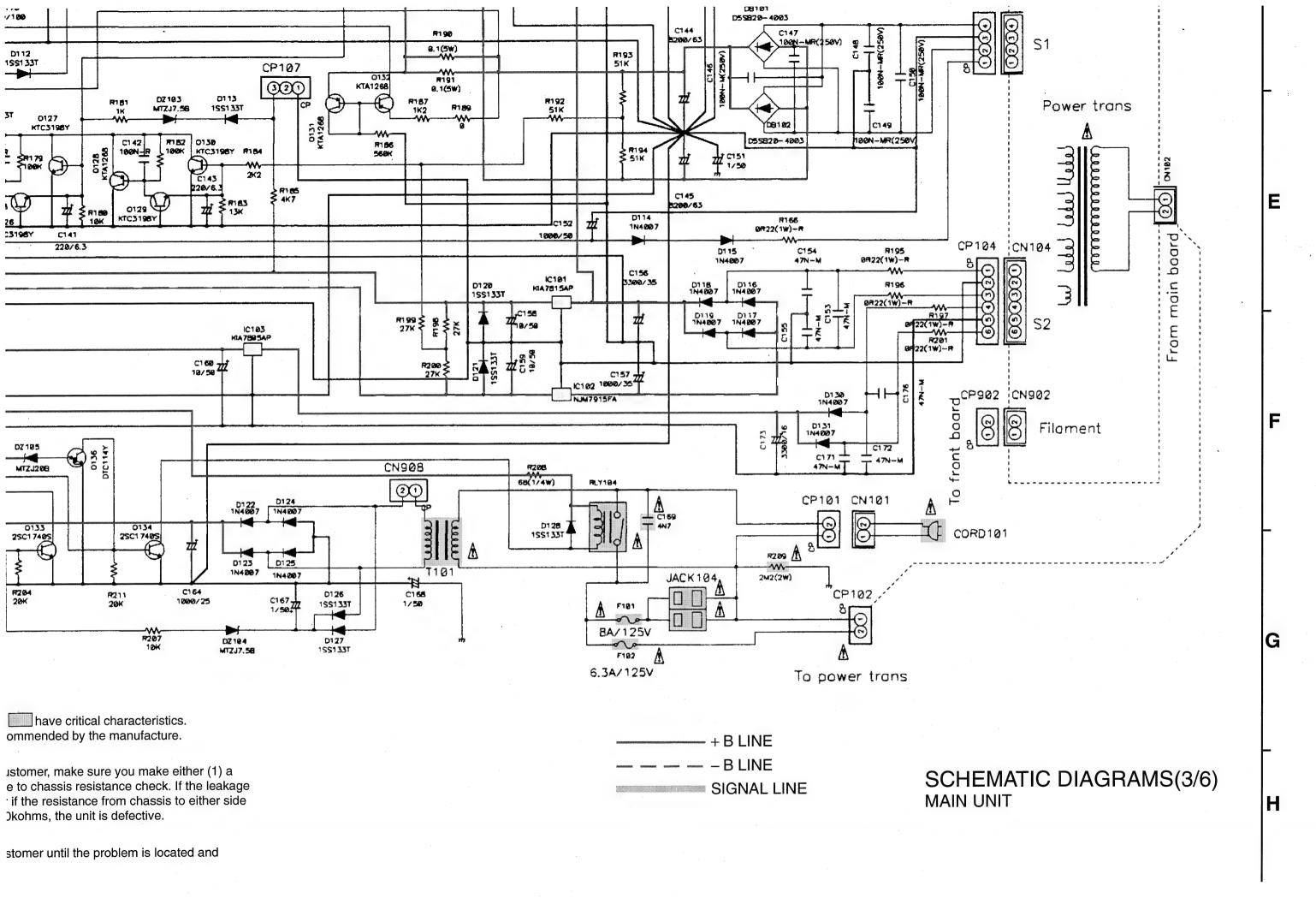
Parts marked with this symbol 1 hav Use ONLY replacement parts recomment

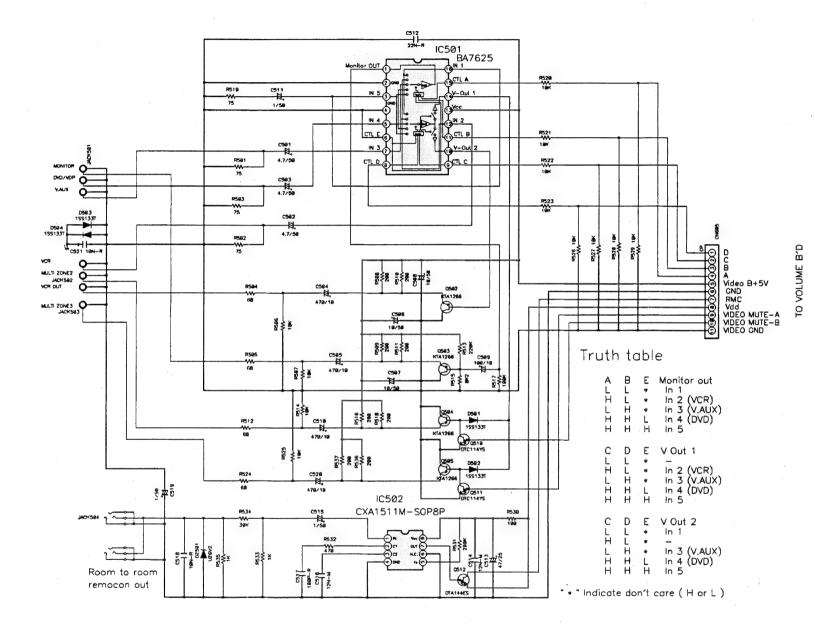
#### **CAUTION:**

Before returning the unit to the customer, leakage current check or (2) a line to cha current exceeds 0.5 milliamps, or if the re of the power card is less than 460kohms,

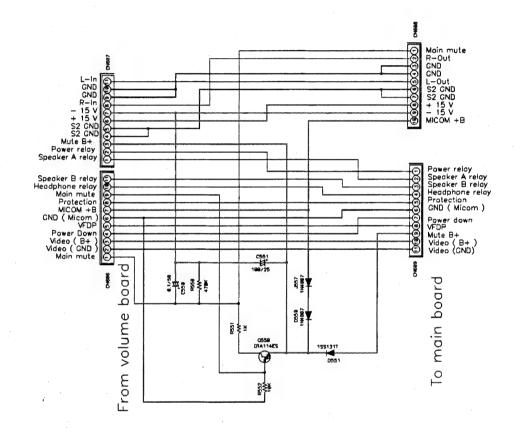
#### **WARNING:**

DO NOT return the unit to the customer  $\boldsymbol{\iota}$  corrected.





## DRA 395 Connection Section



NOTICE
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:

Parts marked with this symbol 1 have critical characteristics Use ONLY replacement parts recommended by the manufacture.

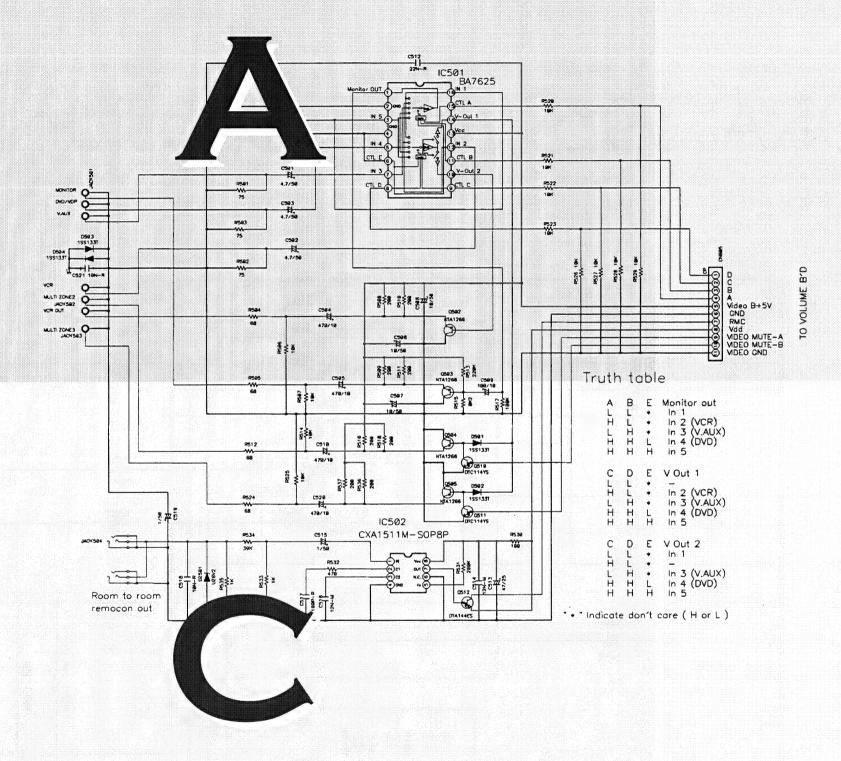
CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

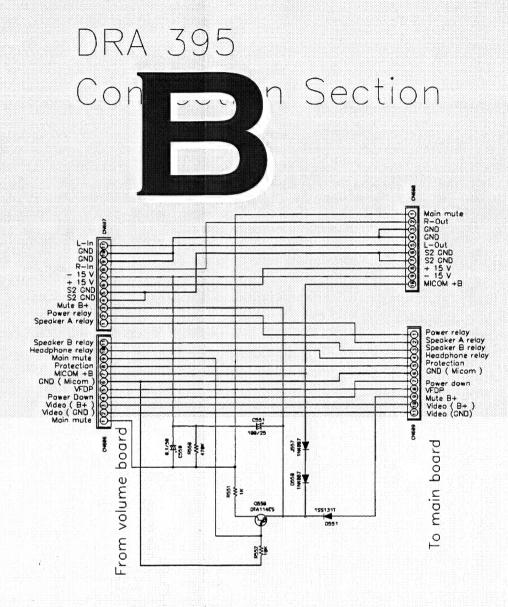
WARNING:

DO NOT return the unit to the customer until the problem is located and



### DRA 395 Video Section







+ B LINE — — — — B LINE

SCHEMATIC DIAGRAMS(4/6) VIDEO UNIT CONNECTOR UNIT

NOTICE ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:

Parts marked with this symbol have critical characteristics.

Use ONLY replacement parts recommended by the manufacture. CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

WARNING:

DO NOT return the unit to the customer until the problem is located and

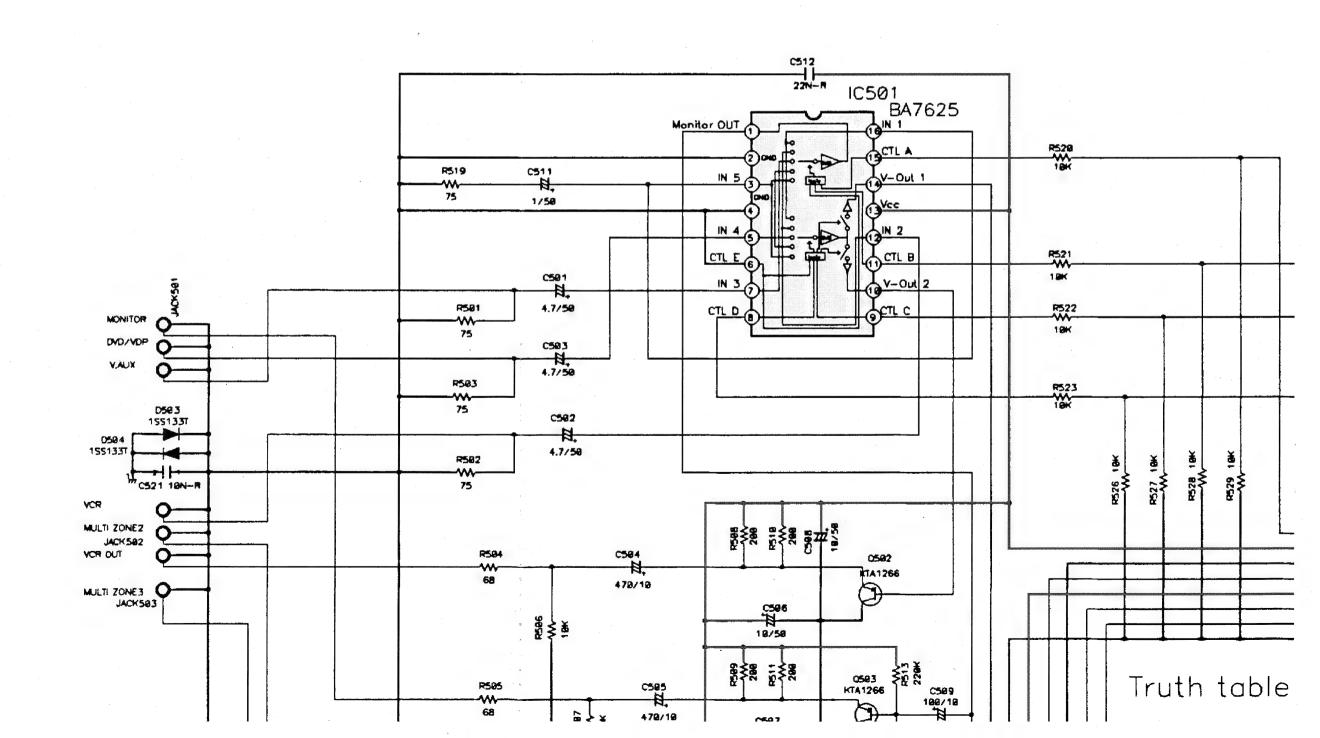
1 2

3

4

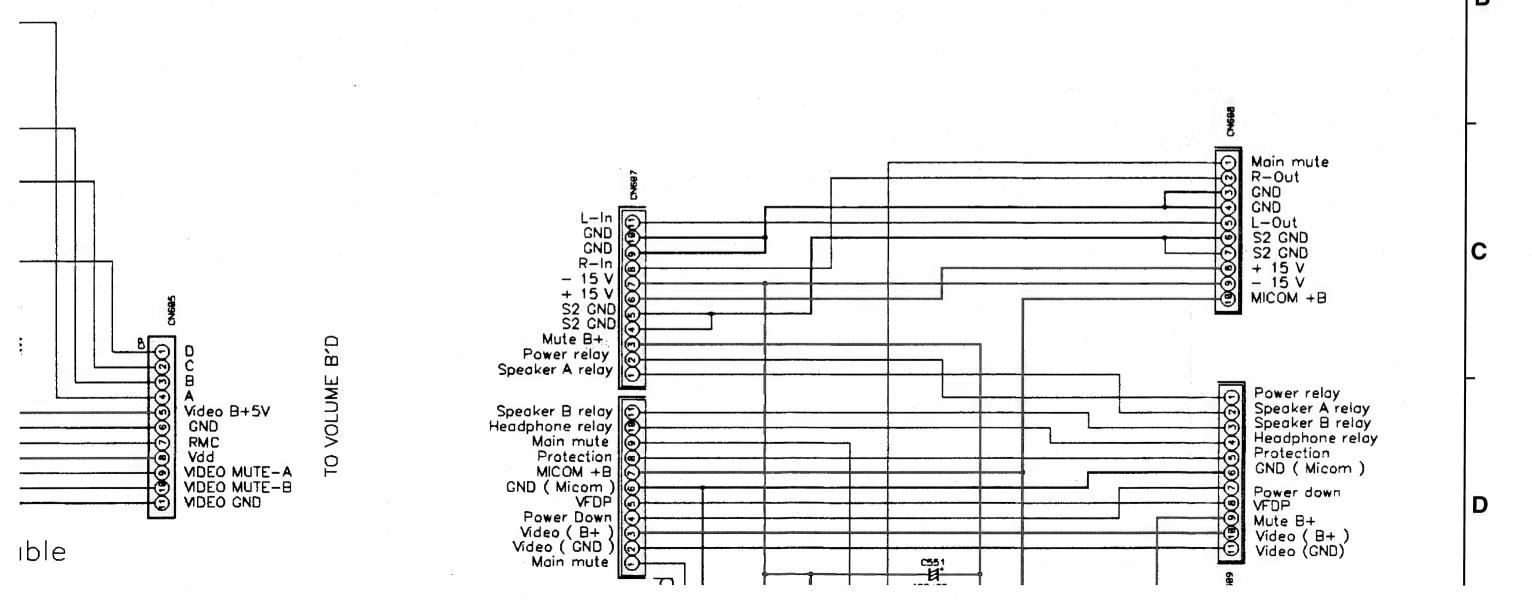
5

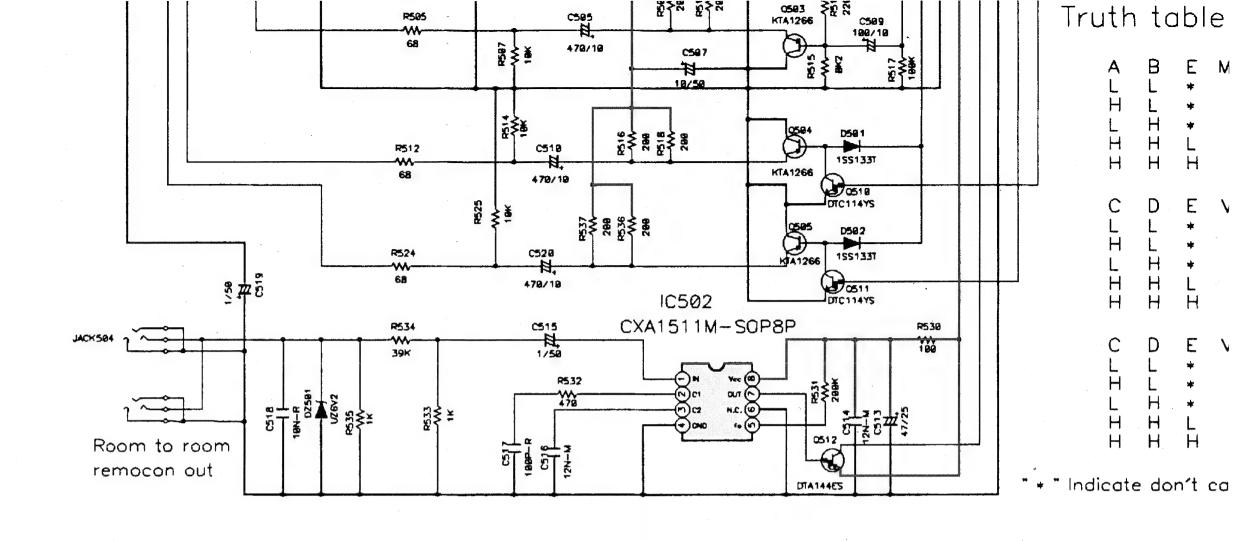
## DRA 395 Video Section



6 , 7 , 8 , 9 , 10 , 11

## DRA 395 Connection Section





ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

#### **WARNING:**

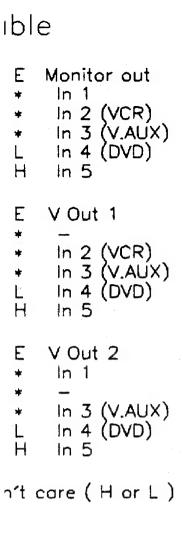
Parts marked with this symbol 1 has Use ONLY replacement parts recommen

#### **CAUTION:**

Before returning the unit to the custome leakage current check or (2) a line to ch current exceeds 0.5 milliamps, or if the of the power card is less than 460kohms

#### WARNING:

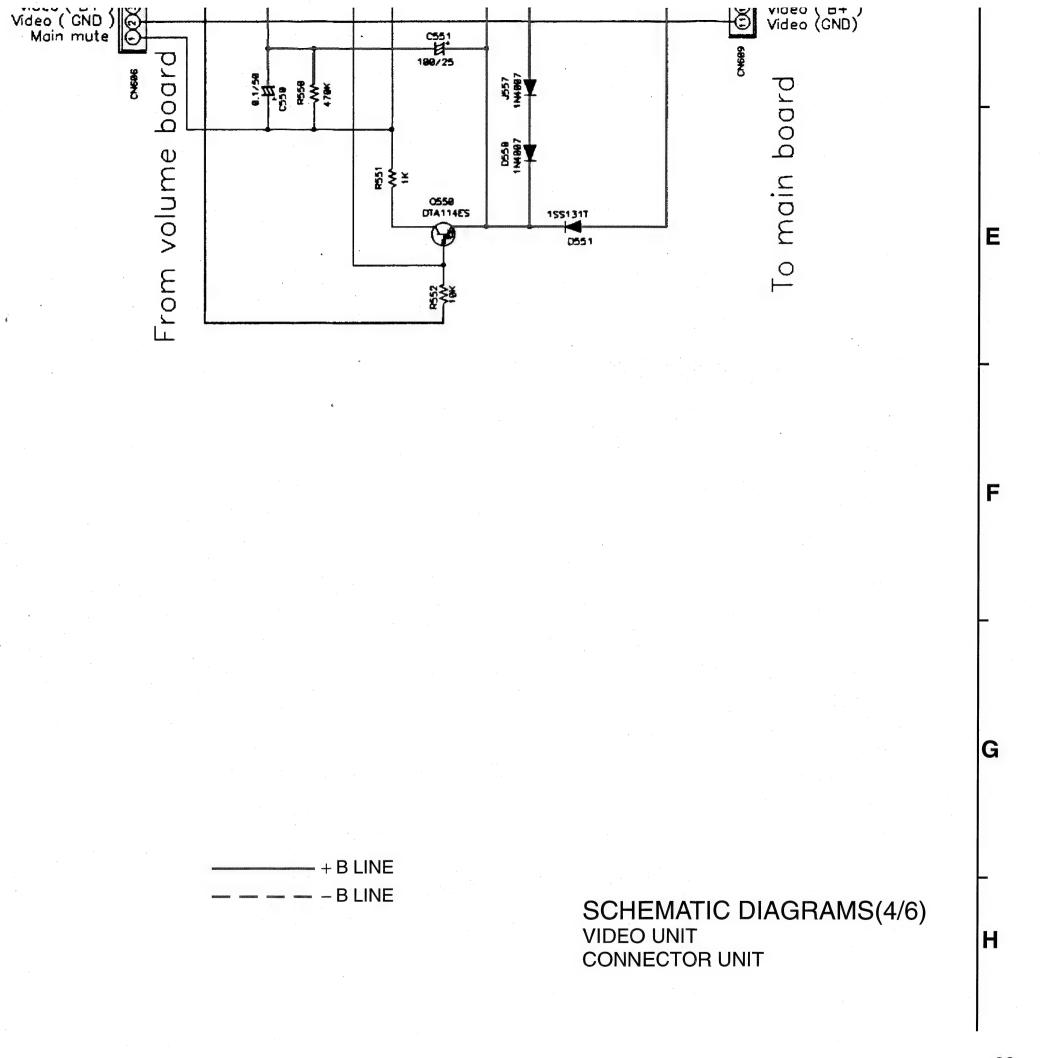
DO NOT return the unit to the customer corrected.

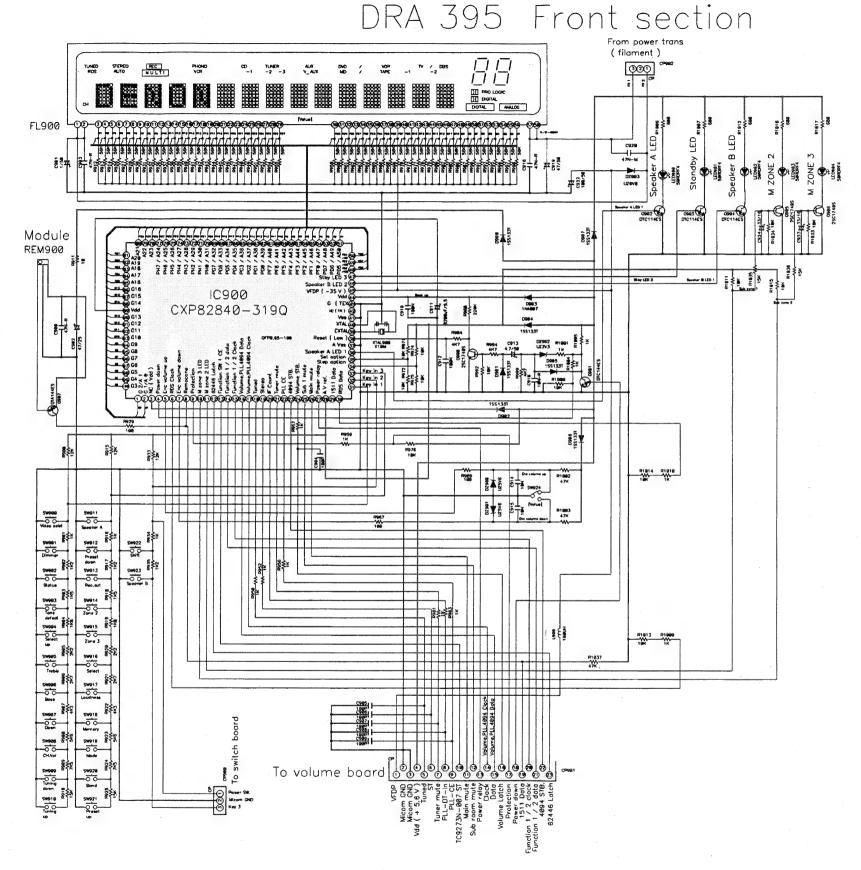


 $\underline{\underline{\text{h}}}$  have critical characteristics. commended by the manufacture.

customer, make sure you make either (1) a ne to chassis resistance check. If the leakage or if the resistance from chassis to either side 30kohms, the unit is defective.

ustomer until the problem is located and





#### WARNING:

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR

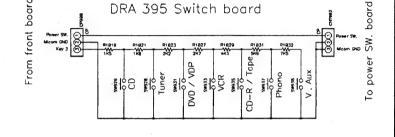
NOTICE.

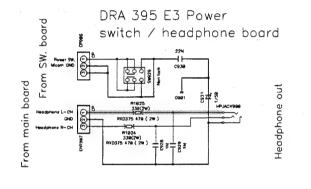
Parts marked with this symbol 1 have critical characteristics.

Use ONLY replacement parts recommended by the manufacture. CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

DO NOT return the unit to the customer until the problem is located and corrected.





-+ B LINE SIGNAL LINE

> SCHEMATIC DIAGRAMS(5/6) FRONT UNIT SWITCH UNIT POWER SW/HP UNIT

#### 10 DRA 395 Front section From power trans (filament) 88 **@** TUNED STERED REC FL900 395 Switch board Module REM900 IC900 CXP82840-319Q DRA 395 E3 Power switch / headphone board R976 18K R1814 R1818 New STA SWIGHT STATE OF THE STATE OF TH To volume board WARNING: NOTICE -+ B LINE Parts marked with this symbol have critical characteristics. Use ONLY replacement parts recommended by the manufacture. ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT SIGNAL LINE CAUTION: Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective. CONDITION. CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. SCHEMATIC DIAGRAMS(5/6) FRONT UNIT SWITCH UNIT WARNING: POWER SW/HP UNIT DO NOT return the unit to the customer until the problem is located and

SCHEMATIC DIAGRAMS(5/6)

. 2

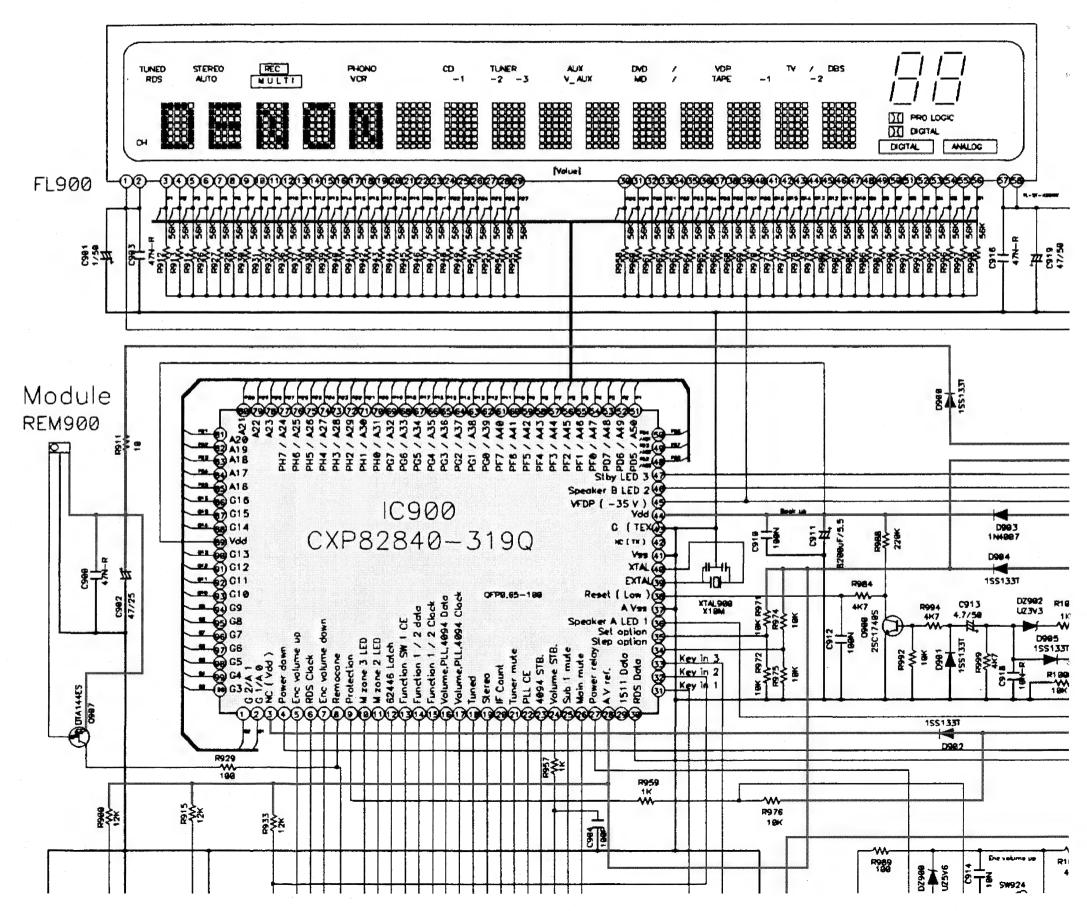
3

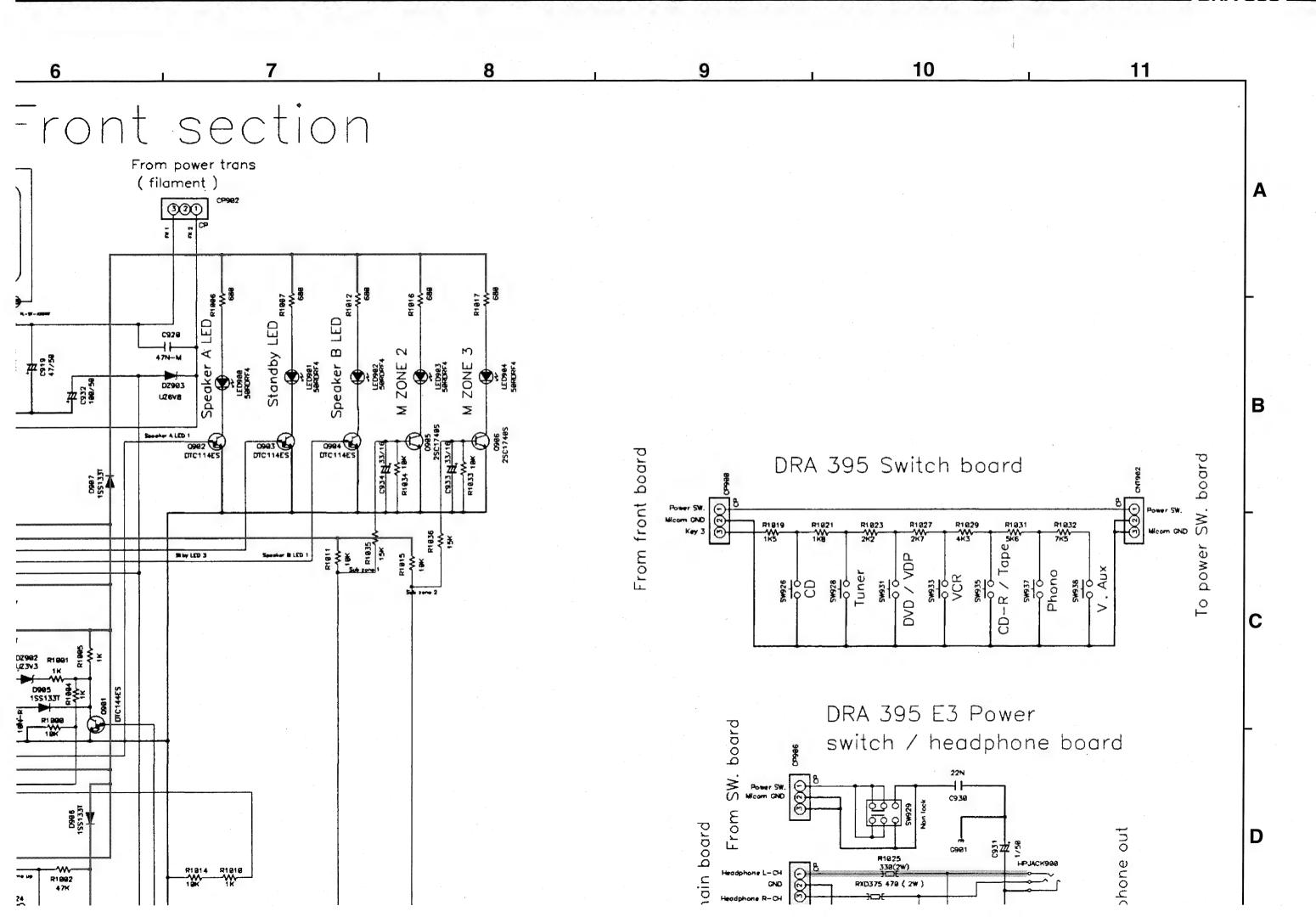
4

5

\_\_\_\_\_L

DRA 395 Fr





Succes	Swp1:									***************************************		R989	945ZN 945ZN 986ZQ 186ZQ		Sw924	R1
SW900 Video selet	SW911		7							<u>'                                      </u>			-   3		Die volume s	down 4
Video selet	Speaker A	\$ \$±					4		100							7
SW9@1	SW912 E S	SW922													$\Box$	
	Preset	Shift				رجوا		L								
SW902 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SW913	Sweeter B			R952	£ \$\$							<u> </u>	,		
Storius	Rec.out	Specier B			**							<b>-</b>				· j
SW983 € \$€	SW914 E S				88.∓							,				
SW983	SW914 0 7				L							<b>₹</b>				9
defeat de sin													<del> </del>			
SW984 B	SW915 2 =				L								++			38
35€	250															4
00	00														111	+++
Treble #	Select ∑ € \$															Щ
SW966	SW917 ESN Loudness			·												
Boss									C995   1889   C996				bock Data			
Sw987 € \$¥	\$ 8 16WZ			סד				1	C986 180P1 C987				4094 Cloc			
SW987 B	Memor			board					1889 C988				7 7			
SW908 8 %	28919 E S			, ğ				-	1889 1889 1889 1889			-	Volume.PLL.4094 Clock			
CH.Vol	Mode			ich				<b>L</b>		ÇP						
Sweeks Ski	2M358 55 50			switch		To	V/O	lume	board			0 0			(9 (9)	
SW989 E	5W928 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			To s		10	VO	uiiic	Dourc			E m ⊢ a a	ون وي	<u> </u>		
1 6.50	%\$¥			8 Powe	r SW.					P CND	une mut	mut Sch	Clost Dot	ction	1 Data 2 clock 2 data	STI Lote
SW918	SW921 B			(New )						VFDP Micom GND Micom GND	Tuned Funed ST Tuned ST Tuned ST Tuner mute	PLL-DI-IN PLL-CE 73N-007 ST Main mute room mute	Power relay Clock Dota	Protection	1511 1 / 2 1 / 2	4094 STB. 62446 Lotch
Up	Up									žž.	رَ حُر	TC9273N- Mai	Po H	5 0		624
											000	C92	_	_	etior etio	
												-			Function Function	

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

#### WARNING:

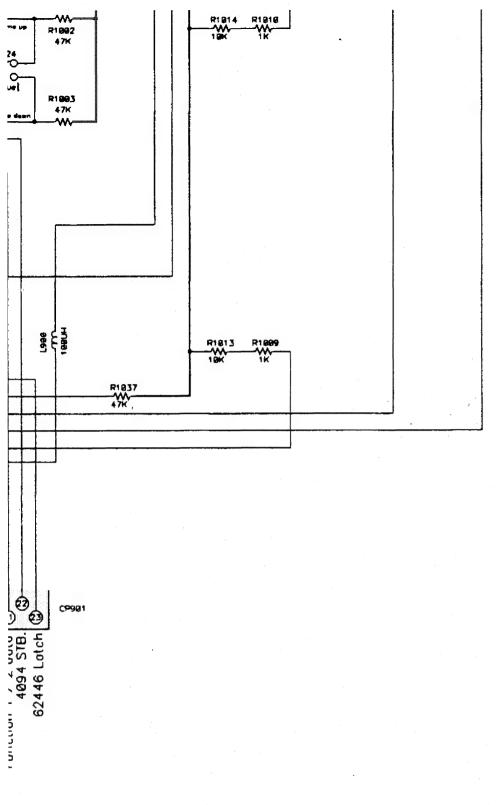
Parts marked with this symbol 1 Use ONLY replacement parts recomm

#### **CAUTION:**

Before returning the unit to the custom leakage current check or (2) a line to current exceeds 0.5 milliamps, or if the of the power card is less than 460koh

#### WARNING:

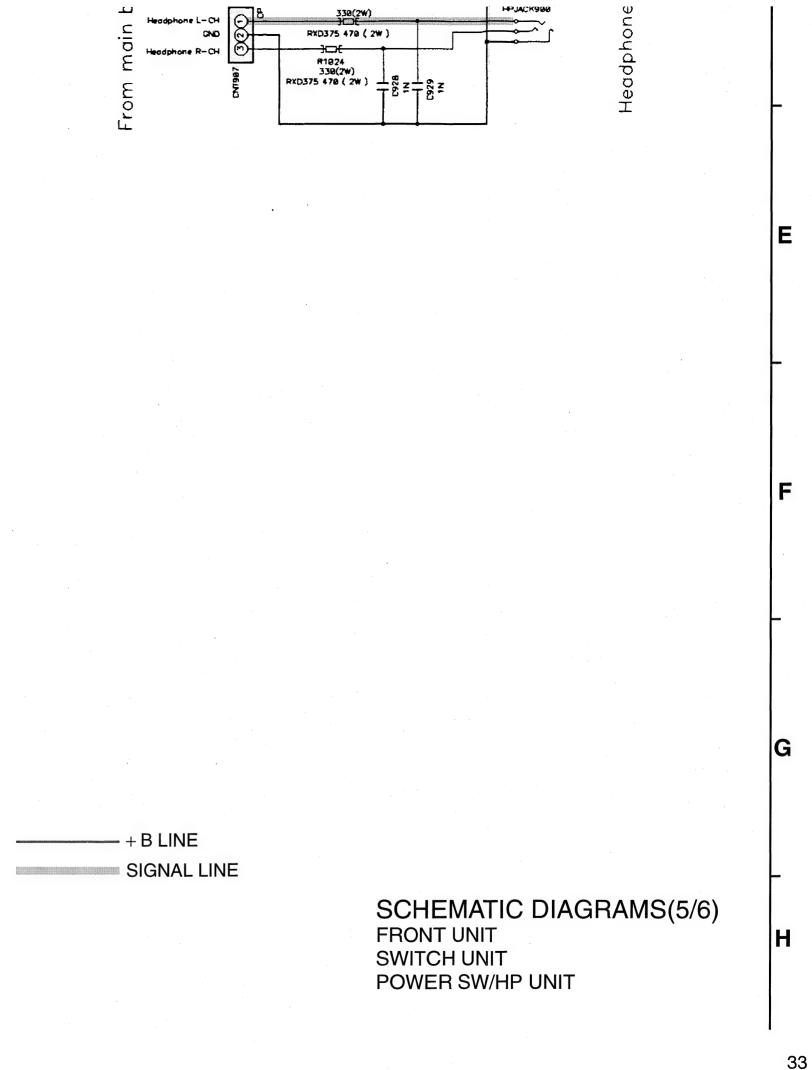
DO NOT return the unit to the custom-corrected.

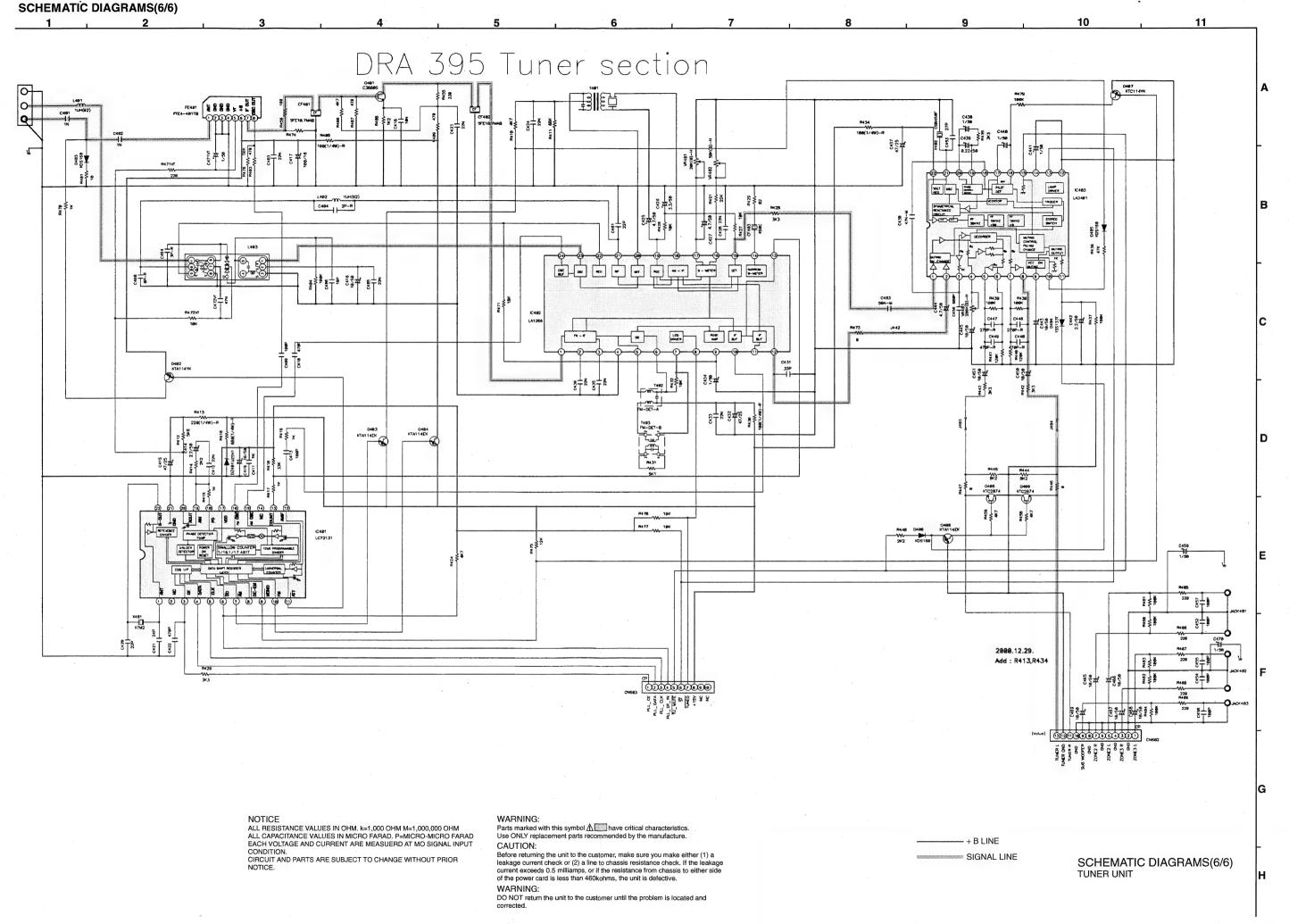


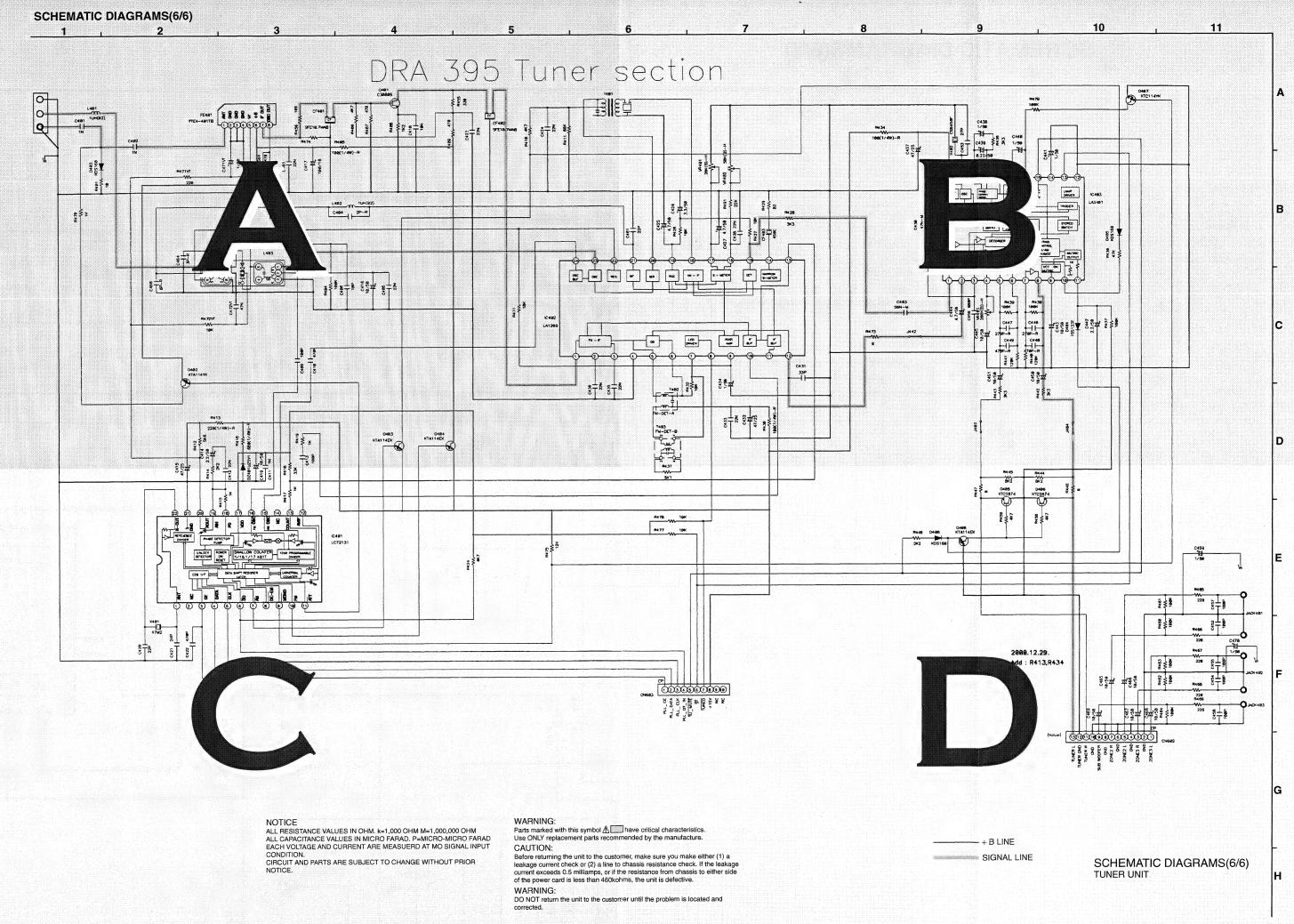
have critical characteristics. recommended by the manufacture.

e customer, make sure you make either (1) a line to chassis resistance check. If the leakage , or if the resistance from chassis to either side 460kohms, the unit is defective.

customer until the problem is located and

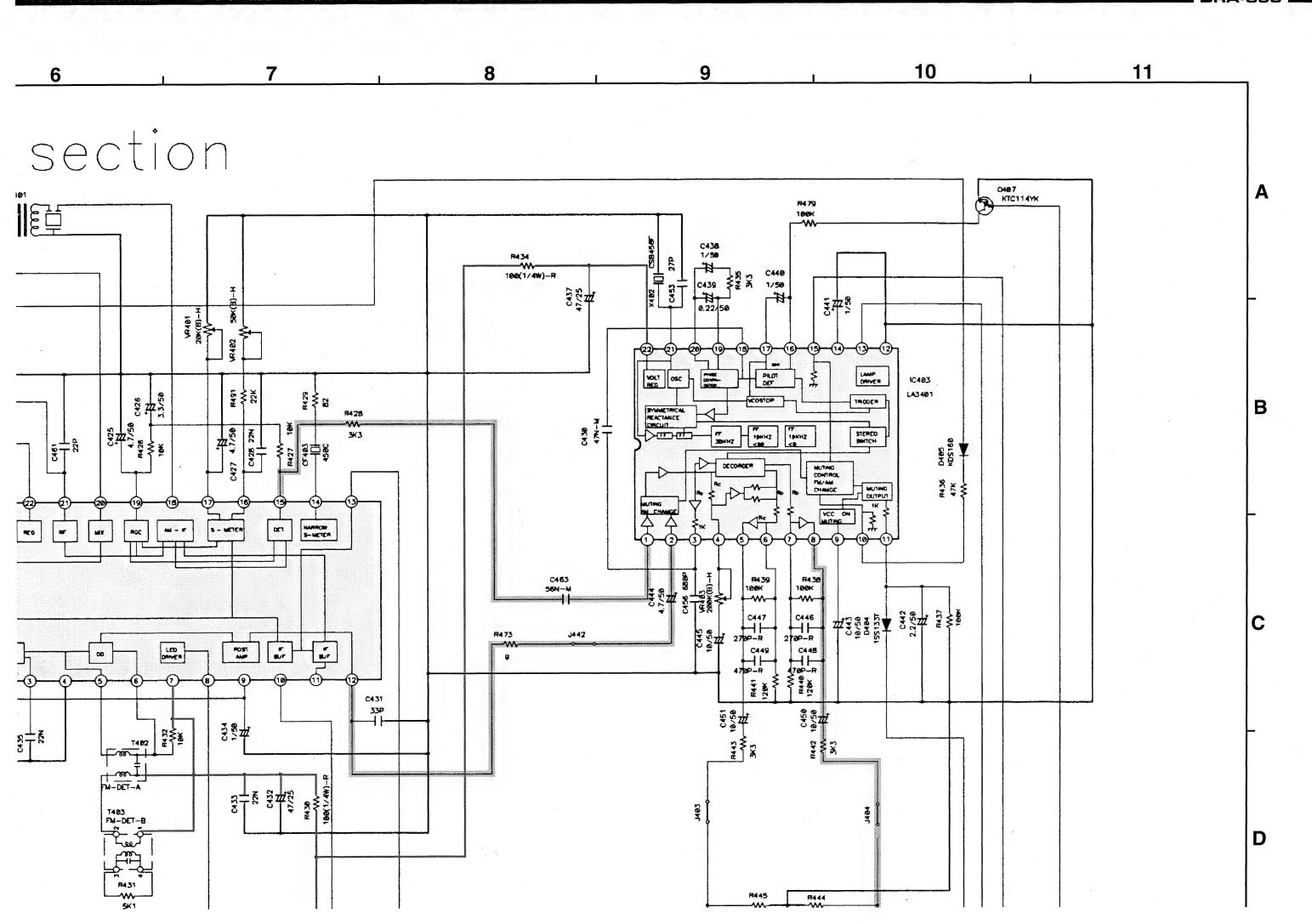


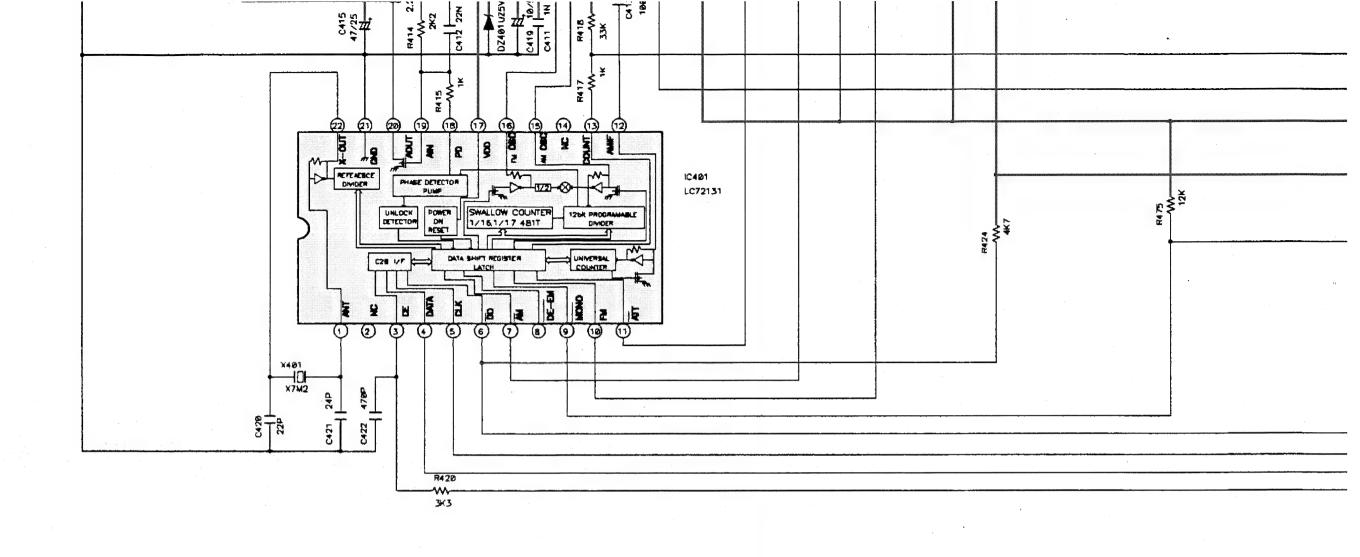




15 3

12 XX





ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

#### **WARNING:**

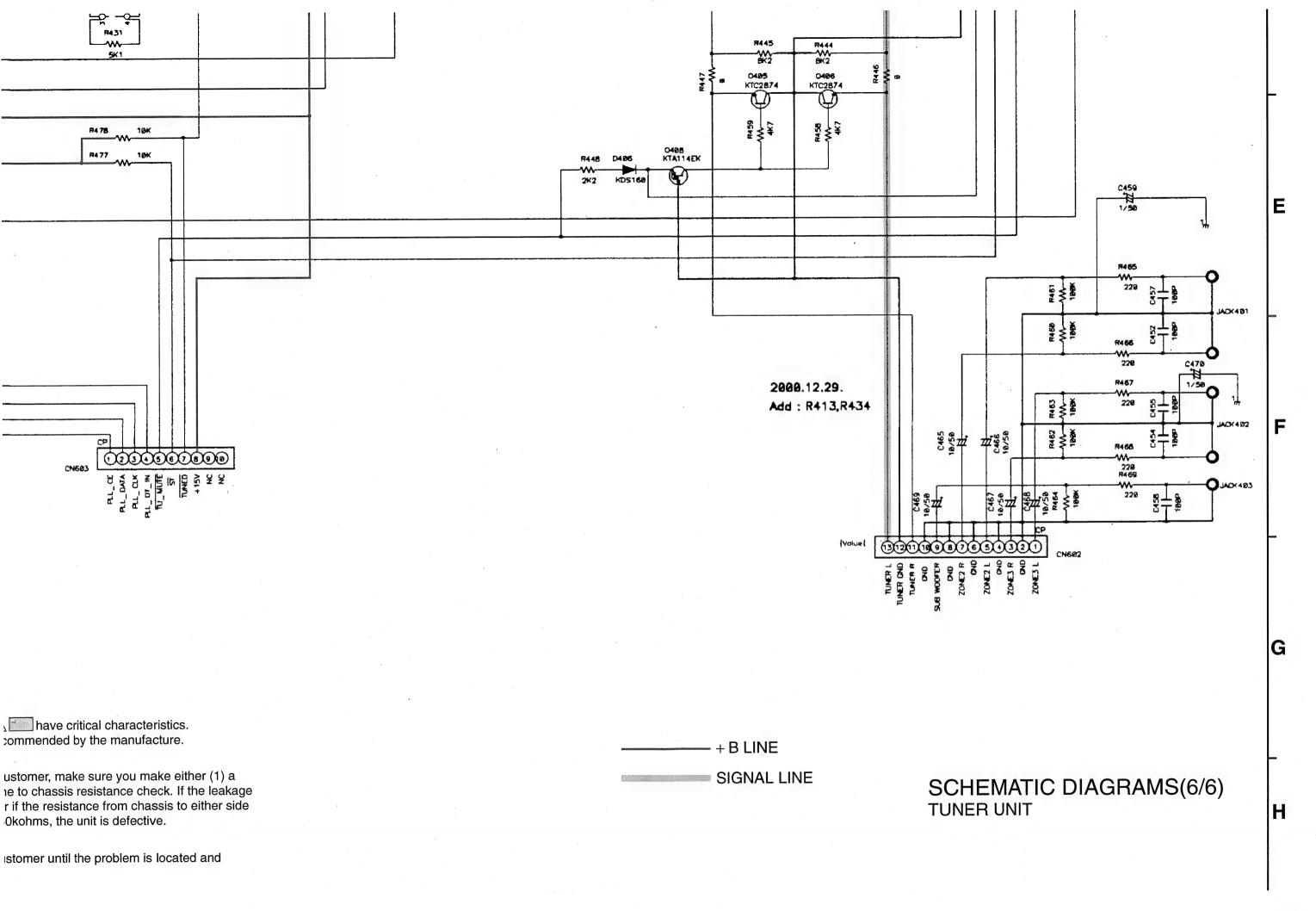
Parts marked with this symbol 1 ha Use ONLY replacement parts recommen

#### **CAUTION:**

Before returning the unit to the customer leakage current check or (2) a line to checurrent exceeds 0.5 milliamps, or if the reof the power card is less than 460kohms

#### **WARNING:**

DO NOT return the unit to the customer corrected.



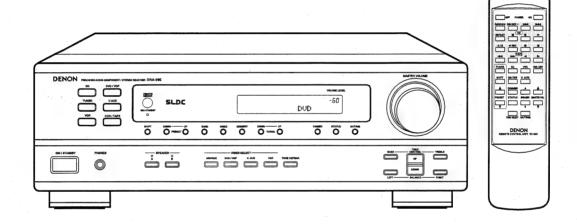
# DENON

For U.S.A., Canada & Europe model

Hi-Fi AM-FM Stereo Receiver

## SERVICE MANUAL MODEL DRA-295

#### **AM-FM STEREO RECEIVER**



#### - TABLE OF CONTENTS -

SAFETY PRECAUTIONS 36	
SPECIFICATIONS36	
DISASSEMBLY 37	
ADJUSTMENT	
BLOCK DIAGRAM 40	
LEVEL DIAGRAM41	
SEMICONDUCTORS42~46	
PRINTED WIRING BOARDS 47~51	
NOTE FOR PARTS LIST52	
PARTS LIST OF P.W.B. UNIT ASS'Y53~59	
EXPLODED VIEW60	
PARTS LIST OF EXPLODED VIEW61,62	
PACKING VIEW	

PARTS	LIST OF PACKING & ACCESSORIES	63
	G DIAGRAM	
	MATIC DIAGRAMS	
	INPUT UNIT	
	VIDEO UNIT	65
(2/5)	VOLUME UNIT	66
	CONNECTOR UNIT	66
(3/5)	MAIN UNIT	67
(4/5)	FRONT UNIT	68
	SWITCH UNIT	68
	POWER SW/HP UNIT	68
(5/5)	TUNER UNIT	69

• Some illustrations using in this service manual are slightly different from the actual set.

#### NIPPON COLUMBIA CO., LTD.

14-14, AKASAKA 4-CHOME, MINATO-KU, TOKYO 107-8011 JAPAN Telephone: 03 (3584) 8111

#### **SAFETY PRECAUTIONS**

The following check should be performed for the continued protection of the customer and service technician.

#### LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

#### **SPECIFICATIONS**

Audio Section

(Power Amplifier)

Rated output:

50W + 50W (8Ω/ohms, 20Hz ~ 20kHz with 0.08% T.H.D.)

**Output terminals:** 

A or B 4 to  $16\Omega$ /ohms A + B 8 to  $16\Omega$ /ohms

(Analog)

**LINE input - PRE OUT** 

Input sensitivity/input impedance:

Frequency response:

 $200 mV/47 k\Omega/kohms$   $10 Hz \sim 50 kHz$ :  $\pm 1.5 dB$ 98 dB (IHF-A weighted)

S/N ratio:

Total harmonic distortion:

0.009% (-3dB at rated output,  $8\Omega$ /ohms) (1kHz)

Rated output:

1.2V

Video Section (U.S.A. & Canada model)

(Standard Video Jacks)

Frequency response:

Input/output level and impedance:

1V p-p,  $75\Omega$ /ohms 5Hz ~ 10MHz +1, -3dB

Tuner Section

**[FM]** (note:  $\mu V$  at 75 $\Omega$ /ohms, 0dBf = 1×10<sup>-15</sup>W)

[AM]

Receiving range:

U.S.A. & Canada model

87.50MHz ~ 107.90MHz 87.50MHz ~ 108.00MHz 520kHz ~ 1710kHz 522kHz ~ 1611kHz

Europe model Usable sensitivity:

1.4µV (14.2dBf)

lBf) 18μV 2.8μV (20.2dBf)

50dB quieting sensitivity:

MONO STEREO

23μV (38.5dBf)

S/N ratio:

MONO 80dB (IHF-A weighted)

STEREO

75dB (IHF-A weighted)

Total harmonic distortion:

MONO

0.15% (1kHz)

narmonic distortion:

STEREO

0.15% (1kHz) 0.3% (1kHz)

General

Power supply:

AC120V, 60Hz (For U.S.A. & Canada model)

AC230V, 50Hz (For Europe model)

Power consumption:

3.0A (For U.S.A. & Canada model)

150W (For Europe model)

Maximum external dimensions: Weight:

434 (W) × 147 (H) × 417 (D) mm (17-3/32" × 5-25/32" × 16-27/64")

9.2kg (20lbs 4.5oz)

• Remote Control Unit

RC-895 (For U.S.A. & Canada model)

RC-907 (For Europe model) R06P/AA Type (two batteries)

Batteries: External dimensions:

50 (W) × 179 (H) × 22 (D) mm (1-31/32" × 7-3/64" × 55/64")

Weight:

125g (Approx. 7.5 oz) (including batteries)

<sup>\*</sup> For purposes of improvement, specifications and design are subject to change without notice.

#### DISASSEMBLY

(Follow the procedure below in reverse order when reassembling)

#### **Top Cover**

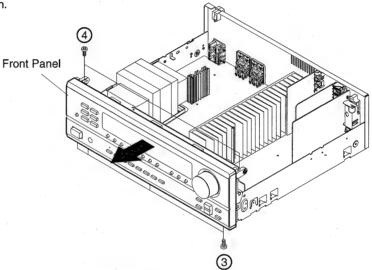
Remove 6 screws 1 and 3 screws 2, detach the Top Cover in the arrow direction.

# (2)

Top Cover

#### **Front Panel**

- Remove 4 screws (3) and 2 screws (4).
   Detach the Front Panel in the arrow direction.



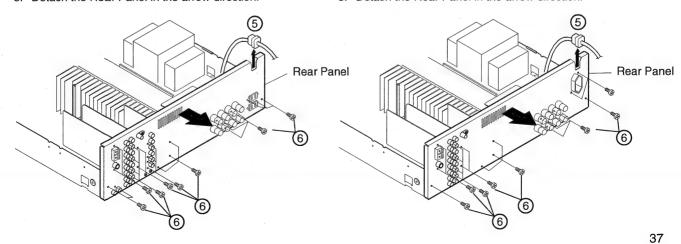
#### **Rear Panel**

#### U.S.A. & Canada model

- 1. Remove cord bushing (5) from the Rear Panel.
- 2. Remove 23 screws 6
- 3. Detach the Rear Panel in the arrow direction.

#### **Europe model**

- Remove cord bushing (5) from the Rear Panel.
   Remove 17 screws (6).
- 3. Detach the Rear Panel in the arrow direction.

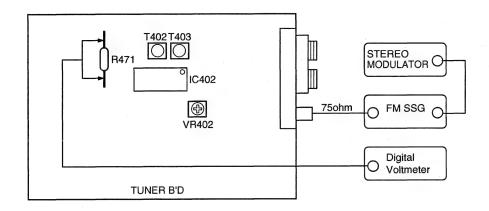


#### **ADJUSTMENT**

#### **Tuner Section**

#### CONNECTION DIAGRAM OF MEASURING INSTRUMENTS

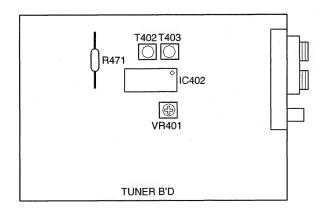
#### FM



#### **FM ALIGNMENT**

	WALIGINIENT											
	Alignment Item	Tuning Frequency Setting	Input					Ou	tput	Adjustment		
Step			Туре	Frequency	Input Level	Modulation	Coupling	Type	Connect to	Points	Adjust to	
1	Center Adjustment	98.1MHz (98.0MHz)	FM SSG	98.1MHz	60dBμ	Mono 1kHz 100%	Antenna Terminal	Digital Voltmeter	R471	T402	± 50mV	
2	Distortion	98.1MHz (98.0MHz)	FM SSG	98.1MHz	60dBμ	Mono 1kHz 100%	Antenna Terminal	Distortion Meter	Output Terminal (L)	T403	Minimum Distortion	
3	Repeat Steps 1 and 2											
4	Signal Level	98.1MHz (98.0MHz)	FM SSG	98.1MHz	20dBμ	OFF	Antenna Terminal	Light "TUNED" on FL Display		VR402	20 <sup>+14</sup> <sub>-10</sub> dB	

#### AM



#### **AM ALIGNMENT**

Char	Alignment	Гистионал	Input	Οι	itput	Α	djustment	Remarks	
Step	Step Item	Frequency		Type	Connect to	Points	Adjust to	Hemaiks	
1	Signal Level	999 (1000) kHz	AM SSG		_	VR401	Light "TUNED" on FL Display	SSG OUTPUT 74dBμ (EMF)	

#### **Audio Section**

#### **Idling Current**

Required measurement equipment : DC Voltmeter

#### Preparation

- (1) Avoid direct blow from an air conditioner or an electric fan, and adjust the unit at normal room tempereture 15 °C ~ 30 °C (59 °F ~ 86 °F).
- Presetting
  - POWER (Power sourse switch)

→ OFF

SPEAKER (Speaker terminal)

→ No load (Do not connect speaker, dummy resistor, etc.)

#### Adjustment

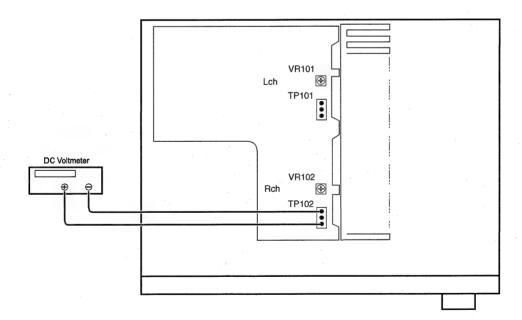
- (1) Remove top cover and set VR101, VR102 on Amp. Unit at full counterclockwise ( ) position.
- (2) Connect DC Voltmeter to test points (Lch: TP101, Rch: TP102).
- (3) Connect power cord to AC Line, and turn power switch "ON".
- (4) Presetting.

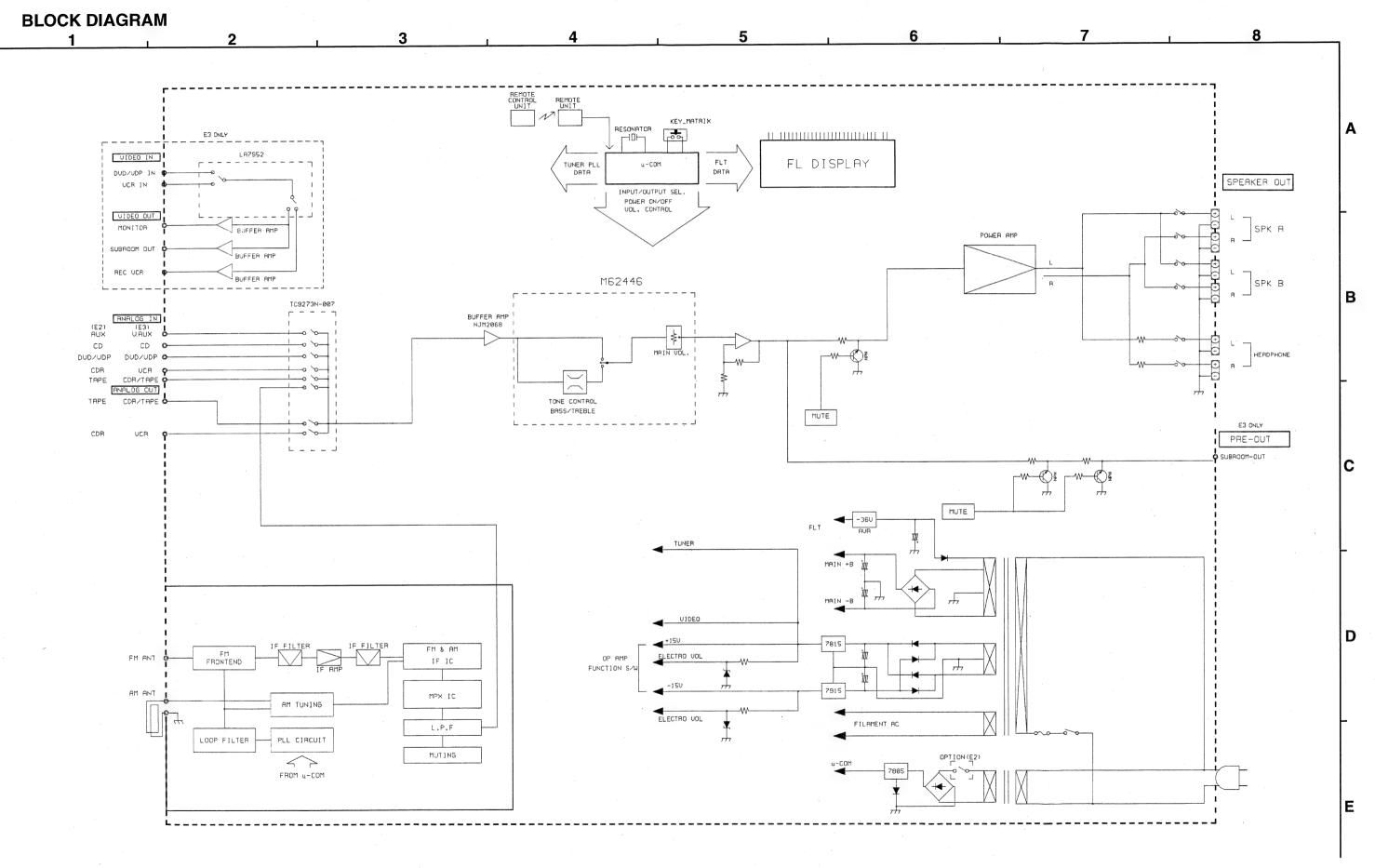
MASTER VOLUME: "---" counterclockwise ( min.)

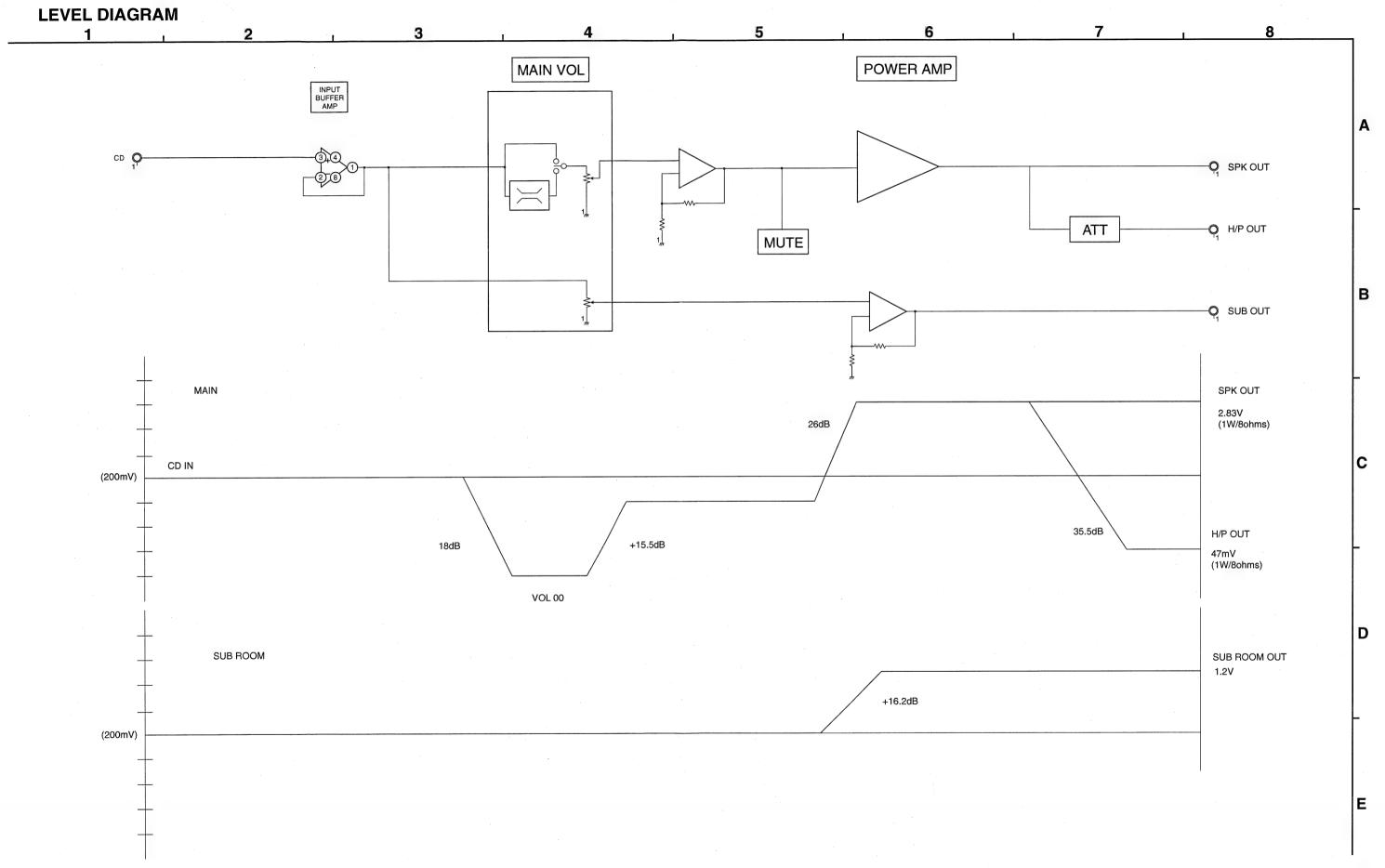
**FUNCTION** 

: CD

- (5) Within 2 minutes after the power on, turn VR101 clockwise ( ) to adjust the TEST POINT voltage to 1.5 mV ±0.5 mV
- (6) After 10 minutes from the preset above, turn VR101 to set the voltage to 2.5 mV ±0.5 mV DC.
- (7) Adjust the Variable Resistors of other channels in the same way.

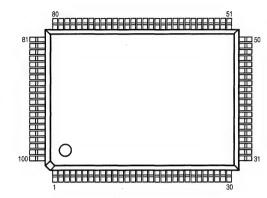






## SEMICONDUCTORS

● IC's CXP82840-321Q (IC900)

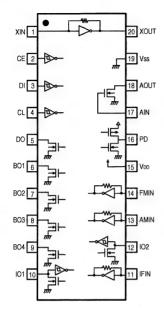


## **CXP82840-321Q Terminal Function**

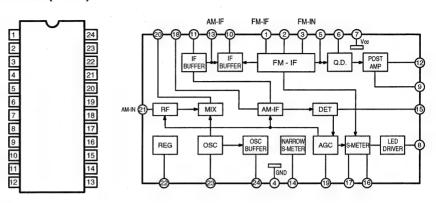
Pin No.	Pin Name	1/0	Function
	G2/A1	0	FL G02
	G1/A0	0	FL G01
	NC(Vdd)	l i	NC(Connect to Vdd)
	POWER DOWN	H	AC OFF Detect
	ENC VOLUME UP	H	Encoder VOLUME UP
	RDS CLOCK	T i	RDS clock input(TDA7330)
7	ENC VOLUME DOWN	ΗĖ	Encoder VOLUME DOWN
	REMOCON	<del>l i</del>	Remote signal input.
	PROTECTION	T i	Protection detecting input.
	SUB ZONE2 LED	Ö	Not used.
	SUB ZONE1 LED	ō	Not used.
	62446 LATCH	ō	Electronic volume control.(M62446 LATCH)
	FUNCTION SW 1 CE	ō	Function IC control.(TC9273 ST)
	FUNCTION 1/2 DATA	o	Function IC control.(TC9273 DATA)
	FUNCTION 1/2 CLOCK	ō	Function IC control.(TC9273 CLOCK)
	VOLUME,PLL,4094,DATA	Ŏ	LC72131.M62446.TC4094(DATA)
	VOLUME, PLL, 4094, CLOCK	ŏ	LC72131,M62446,TC4094(CLOCK)
	TUNED	Ť	TUNED signal in.
	STEREO	l i	STEREO signal in.
	IF COUNT	l i	PLL data in.(LC72131)
	TUNER MUTE	Ö	Tuner mute output.
	PLL CE	0	LC72131(CE)
	4094 STB	ō	TC4094(STB)
	VOLUME STB	Ö	Not used.
	SUB 1 MUTE	O.	Not used.
	MAIN MUTE	O	MAIN, Subwoofer mute output.
	POWER RELAY	O	Power supply relaycontrol.
	AV REF.	Ť	Reference voltage input for A/D converter.
	1511 DATA	0	Not used.
	RDS DATA	ΙŤ	RDS data input(TDA7330)
	KEY IN 1		Key input 1
	KEY IN 2	Ti	Key input 2
	KEY IN 3	Ti	Key input 3
	STEP OPTION		Area select.
	SET OPTION		Model select.
	SPEAKER A LED 1	0	SPEAKER A LED indicator control
	A VSS		A/D converter GND.
	RESET		Low-level active, system reset.
	EXTAL	i	EXTAL(10MHz)
	XTAL	0	XTAL(10MHz)
	VSS	T	GND
42	NC(TX)	0	Not used.
	G(TEX)	1	GND
	VDD	J	Vcc SUPPLY.
	VFDP	ı	FDP voltage supply.

Pin	Pin Name	1/0	Function
No.	Fill Name	""	FullCuoii
46	SPEAKER B LED 2	0	SPEAKER B LED indicator control
47	STBY LED 3	0	STANDBY LED indicator control
48	PD2/A53	0	FL P38
	PD3/A52	0	FL P37
50	PD4/A51	0	FL P36
	PD5/A50	0	FL P01
	PD6/A49	0	FL P02
53	PD7/A48	0	FL P03
	PF0/A47	0	FL P04
55	PF1/A46	0	FL P05
	PF2/A45	0	FL P06
	PF3/A44	0	FL P07
	PF4/A43	0	FL P08
59	PF5/A42		FL P09
	PF6/A41	0	FL P10
61	PF7/A40	0	FL P11
	PG0/A39	0	FL P12
	PG1/A38 PG2/A37	0	FL P13 FL P14
65	PG3/A36	0	FL P15
	PG4/A35	0	FL P16
	PG5/A34	0	FL P17
	PG6/A33		FL P18
	PG7/A32		FL P19
70	PH0/A31	ō	FL P20
	PH1/A30	ō	FL P21
	PH2/A29	ō	FL P22
	PH3/A28	0	FL P23
	PH4/A27	0	FL P24
	PH5/A26	0	FL P25
76	PH6/A25	0	FL P26
77	PH7/A24	0	FL P27
78	A23	0	FL P28
79	A22		FL P29
80	A21	0	FL P30
81	A20	0	FL P31
. 82	A19	0	FL P32
83	A18		FL P33
84	A17		FL P34
85	A16		FL P35
86	G16		FL G16
87	G15	0	FL G15
88	G14	0	FL G14
	Vdd		Vcc SUPPLY.
	G13		FL G13
	G12		FL G12 FL G11
	G11 G10		FL G10
94	G9		FL G09
95	G8		FL G08
96	G7		FL G07
	G6		FL G06
98	G5	0	FL G05
99	G4	0	FL G04
100	G3	ō	FL G03
.00			1. = ===

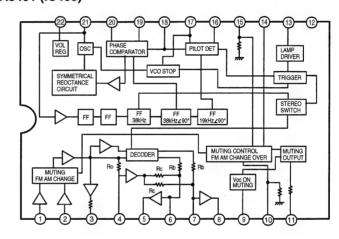
#### LC72131M (IC401)



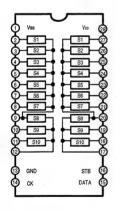
#### LA1266 (IC402)



#### LA3401 (IC403)



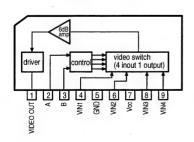
#### TC9273N-007 (IC300)



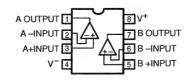
#### ● TC9273N Terminal Function

Pin No	Symbol	Name	Function	
1	Vss	+Power Terminal	Dual Power Use:VDD = 8.0~17 V Single Power Use:VDD = 8.0~18V	
13	GND	Digital Ground	GND=0V GND=0V	
28	VDD	+Power Terminal	Vss=-8.0~-17V	
2~12 12~27	S1~S10	I/O Terminal	Input terminal of analog switch.	
14	СК	Clock Input	Clock input for data transfer.	Low level
15	DATA	Data Input	Serial input for switch setting.	Border Input
16	STB	Strobe Input	Strobe InputStrobe input for data writing.	Terminal

#### LA7952 (IC500) (U.S.A./Canada model)



#### NJM2068DD (IC301,602)



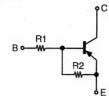
#### TRANSISTORS

DTA114EK DTA114YK DTC114YK



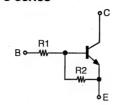
DTA114ES DTA144ES DTC114ES DTC114YS DTC144ES

#### **DTA** series



	R1	R2
DTA114EK	10kohm	10kohm
DTA114ES	10kohm	10kohm
DTA114YK	10kohm	47kohm
DTA114ES	47kohm	47kohm

#### **DTC** series



	R1	R2
DTC114ES	10kohm	10kohm
DTC114YK	10kohm	47kohm
DTC114YS	10kohm	47kohm
DTC144ES	47kohm	47kohm



KTC3880S

TOP VIEW

2SD947F KTA1266Y KSA992F KSC1845F KTC3200BL KTC3198Y KTA1268BL KSA916Y 2SC1740S

KTC2874B





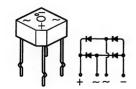
2SB1559

2SD2389

#### DIODES (LED Included)

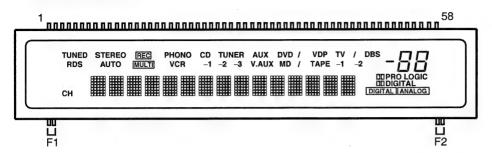
MTZJ3.3B 1N400 MTZJ5.1B 1SS13		HL-50RDRF4
MTZJ5.6B MTZJ6.2B MTZJ6.8B MTZJ7.5A MTZJ7.5B MTZJ18B MTZJ20B	TOP VIEW	TOP VIEW

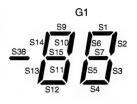
#### **KBPC604**



#### • FL DISPLAY

#### 16-st-42GNK (FL900)





	G15 STEREO AUTO	 VCR	-1 -2		UX MD	G5 G4 / VDP / TAPE	G3 TV -1	G2 G1 DBS
сн				G8				DIPRO LOGIC DIDIGITAL DIGITAL ANALOG

G2~G16											
S1	S2	S3	S4	S5							
S6	S7	S8	S9	S10							
S11	S12	S13	S14	S15							
S16	S17	S18	S19	S20							
S21	S22	S23	S24	S25							
S26	S27	S28	S29	S30							
S31	S32	S33	S34	S35							

#### **Pin Assignment**

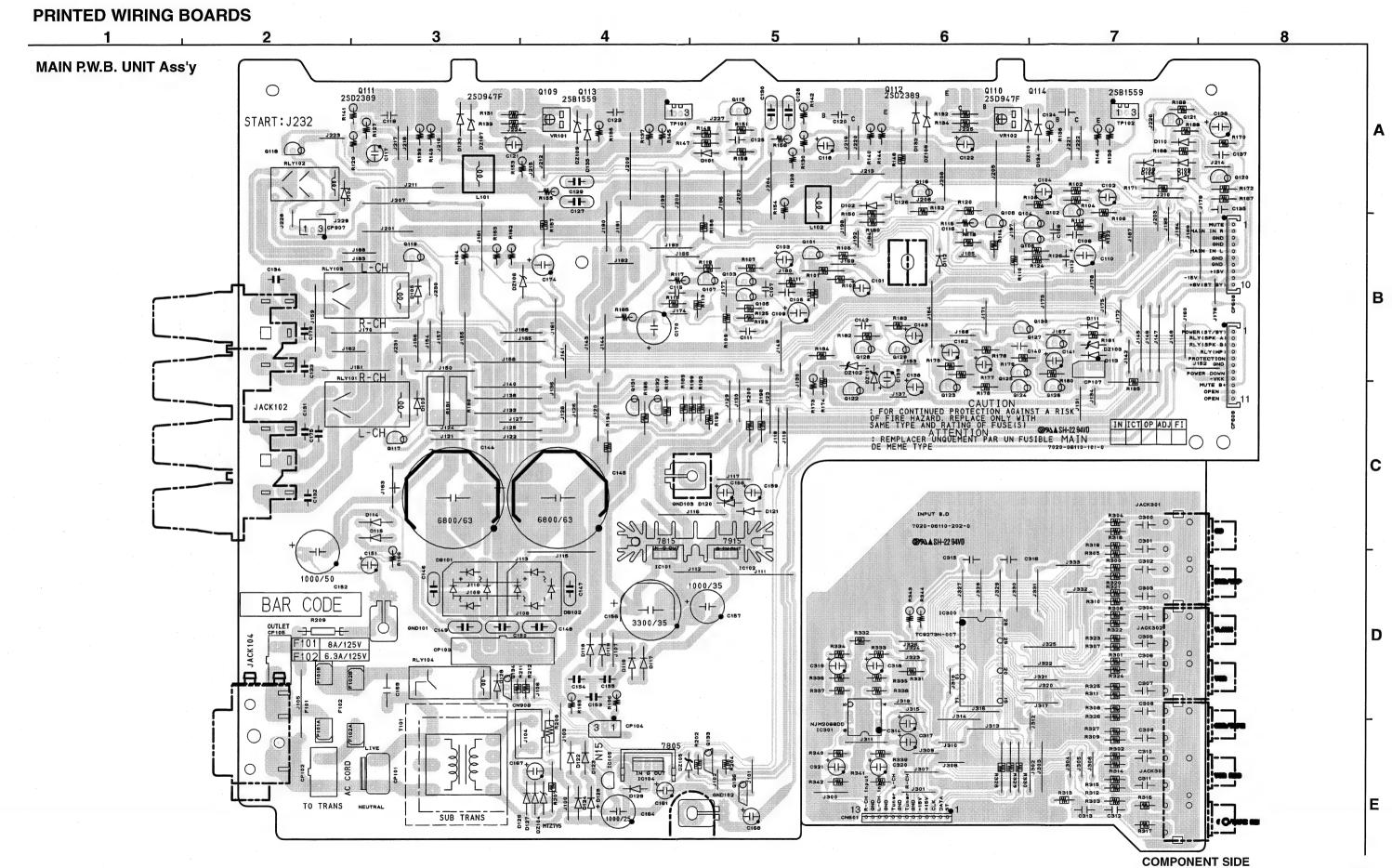
PIN NO. CONNECTION	1 F1	2 F1	3 S1	4 S2	-	6 S4	-	-	-				14 S12				. •	19 S17	20 S18
PIN NO. CONNECTION													34 S32						40 S38
PIN NO. CONNECTION	41 G16	42 G15	43 G14	44 G13	. •	46 G11				51 G6	52 G5	53 G4	54 G3	55 G2	56 G1	•	58 F2		

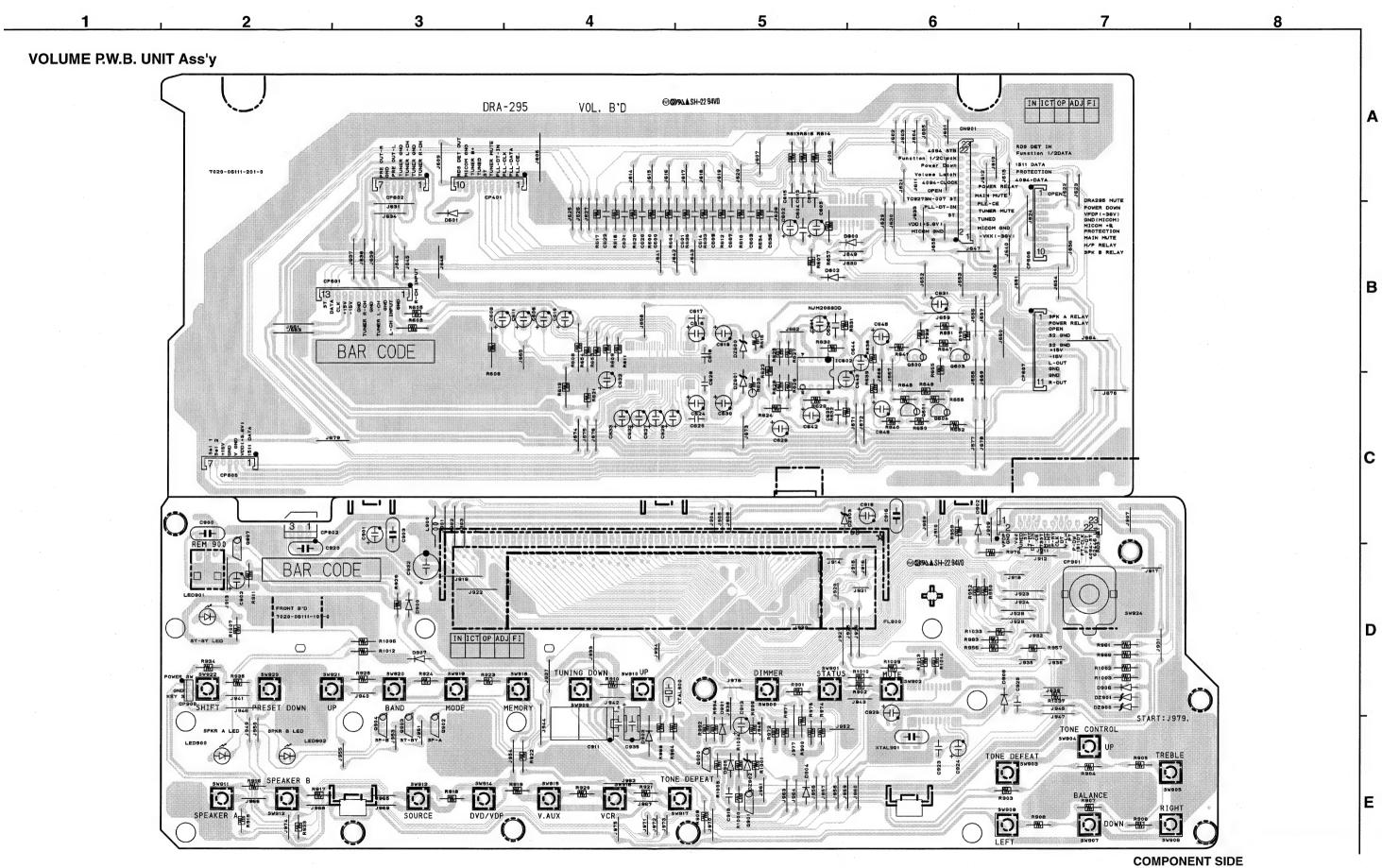
F1,F2 : Filament G1~G16 : Grid S1~S38 : Anode

#### **Anode & Grid Assignment**

	G1	G2~G16		G1	G2~G16	-	G1	G2~G16		G1	G2~G16
S1	S1	S1	S10	S10	S10	S19		S19	S28		S28
S2	S2	S2	S11	S11	S11	S20		S20	S29		S29
S3	S3	S3	S12	S12	S12	S21		S21	S30		S30
S4	S4	S4	S13	S13	S13	S22		S22	S31		S31
S5	S5	S5	S14	S14	S14	S23		S23	S32		S32
S6	S6	S6	S15	S15	S15	S24		S24	S33		S33
S7	S7	S7	S16		S16	S25		S25	S34		S34
S8		S8	S17	DIGITA	L S17	S26		S26	S35		S35
S9	S9	S9	S18	PRO LO	GIC S18	S27		S27			

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	G16
S36	DIGITAL	/	TV	VDP	/(DVD)	DVD	AUX		TUNER	CD		PHONO	REC		STEREO	TUNED
S37	ANALOG	-2	-1	TAPE	/(MD)	MD	V.AUX		-2	-1		VCR	MULT	l ——	AUTO	RDS
S38	S38	DBS							-3							CH





■ DRA-295 ■

 $\infty$ • • •-□-•  $\infty$ 000 FOIL SIDE

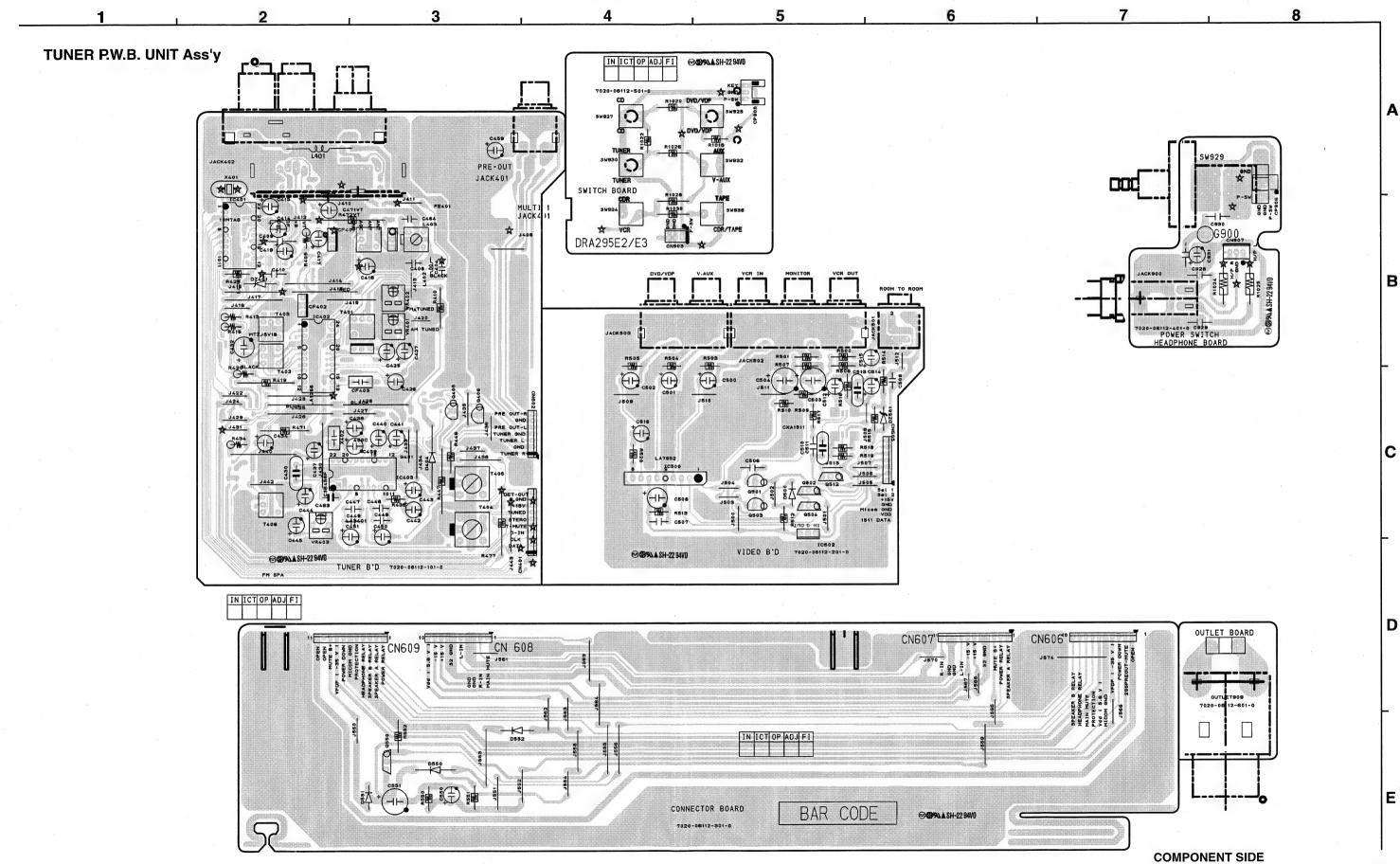
В

С

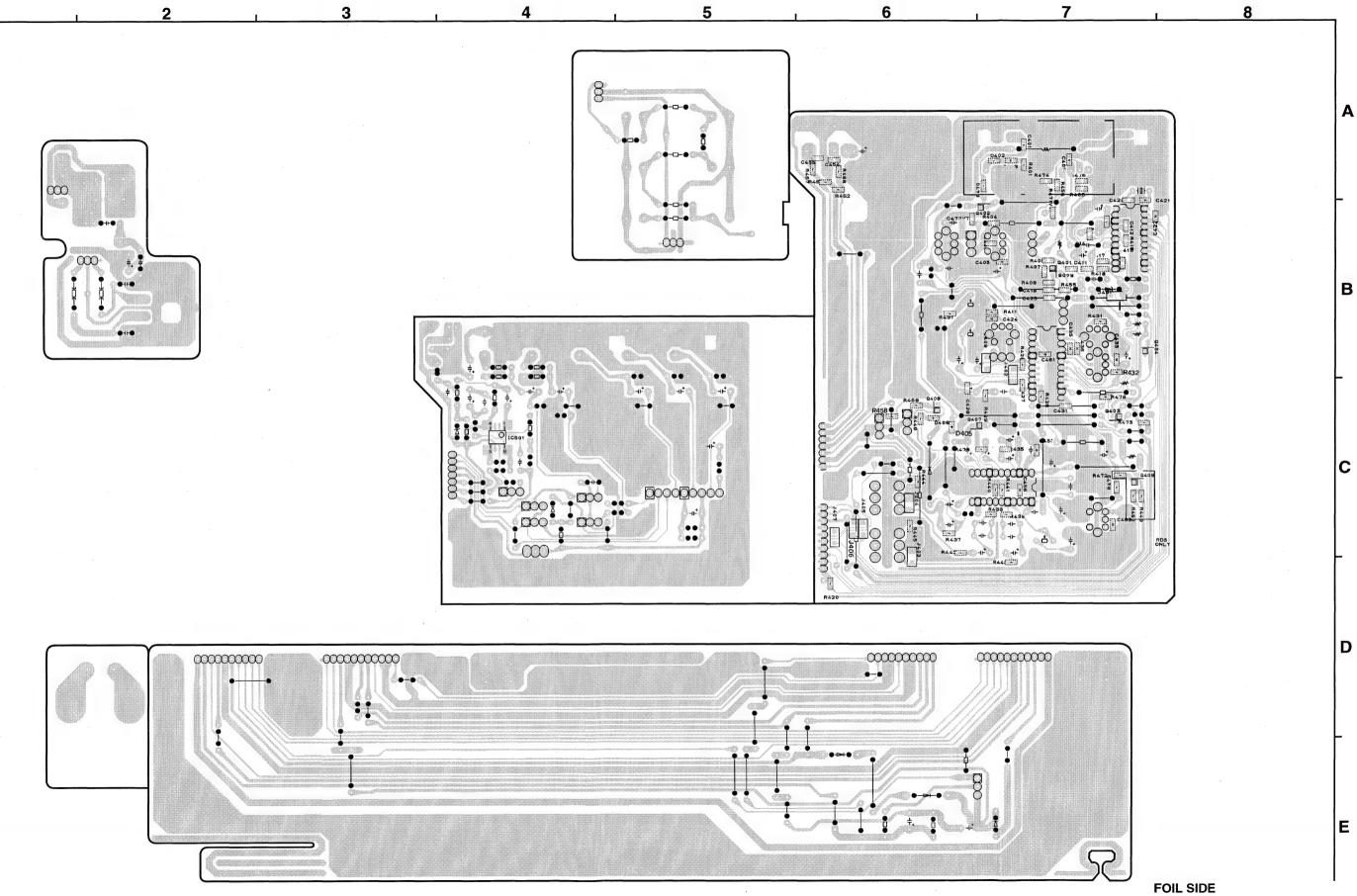
.

D

E



DDA-295 =



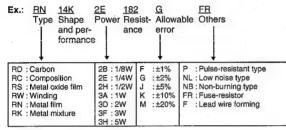
#### NOTE FOR PARTS LIST

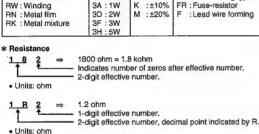
- Part indicated with the mark "⊚" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

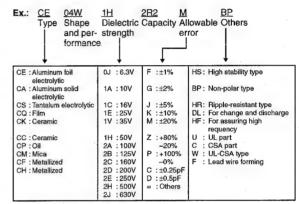
Parts marked with this symbol  $\hat{\Lambda}$  have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.

#### Resistors

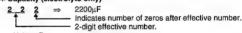




#### Capacitors



#### \* Capacity (electrolyte only)



• Units: μF.

#### \* Capacity (except electrolyte)

2 ≥ 200pF=0.0022μF
(More than 2)—Indicates number of zeros after effective number.
2-digit effective number.

• Units: pF.

• Units: pF.

• When the dielectric strength is indicated in AC, "AC" is included after the dieelectric strength value.

## PARTS LIST OF P.W.B. UNIT

MAIN P.	v.B. UNI	T ASS'Y		Note: T
Ref. No.	Part No.	Part Name	Remarks	Ref
SEMICON	DUCTORS	GROUP		R16
IC101	963 0057 903	IC KIA7815AP	J126781500060	R17
IC102	963 0044 806	IC NJM7915FA	J126791500010	R19
IC104	960 0196 001	IC NJM7805FA	J126780500130	R19
IC105	960 0195 808	IC ICP-N15	J120001500030	11
				R20
IC300	960 0174 308	IC TC9273N-007	J080927300000	R20
IC301	960 0179 701	IC NJM2068DD	J121206800000	11
			,	R34
Q101,102	960 0196 603	Transistor KTC2874B	J502287400010	] }
Q103-106	960 0196 205	Transistor KSA992Y	J5000992F0050	VR1
Q107,108	960 0196 506	Transistor KSC1845F	J5021845F0000	
Q115,116	960 0196 506	Transistor KSC1845F	J5021845F0000	CAI
Q117-119	963 0022 006	Transistor DTC114YS	J6020114Y0050	C10
Q120	960 0196 302	Transistor KTA1268BL	J5001268B0050	C10
Q121	960 0196 700	Transistor KTC3200BL	J5023200B0050	C10
Q122	960 0189 005	Transistor KSA916Y	J5000916Y0050	C10
Q123	960 0005 105	Transistor KTA1266Y	J5001266Y0050	C10
Q124	960 0005 202	Transistor KTC3198Y	J5023198Y0000	C11
Q125	960 0196 302	Transistor KTA1268BL	J5001268B0050	C11
Q126,127	960 0005 202	Transistor KTC3198Y	J5023198Y0000	C11
Q128	960 0196 302	Transistor KTA1268BL	J5001268B0050	C11
Q129,130	960 0005 202	Transistor KTC3198Y	J5023198Y0000	C12
Q131,132	960 0196 302	Transistor KTA1268BL	J5001268B0050	C12
Q133,134	960 0196 409	Transistor 2SC1740SR	J5021740S0010	C12
Q136	963 0022 006	Transistor DTC114YS	J6020114Y0050	C12
	-			C13
D101-113	963 0020 309		K000013300520	11
D114-119	963 0058 407	Diode 1N4007	K000400700520	C13
D120,121	963 0020 309	Diode 1SS133	K000013300520	C13
D122-125	963 0058 407	Diode 1N4007	K000400700520	C13
D126-129	963 0020 309	Diode 1SS133	K000013300520	C13
D132-135	963 0020 309	Diode 1SS133	K000013300520	C14
		D	1/0 /300 /00000	C14
DB101,102	960 0197 107	Diode KBPC604	K047604000020	C14
D7404 400	000 00 40 000	7 " 1- 14771400	K00040D044500	C14
DZ101,102	963 0046 202		K06018R044520	C14
DZ103,104	963 0047 405	Zener diode MTZJ7.5B	K06007R544520	C14
DZ105	963 0058 708	Zener diode MTZJ20B	K06020R044520	C15
DZ106	960 0095 500	Zener diode MTZJ5.1B	K06005R144520	C15
DZ107-110	963 0047 502	Zener diode MTZJ3.3B	K06003R344520	C15
				C15
RESISTO	RS GROUP			C15
R117,118	960 9004 301	Metal film 47ohm 1/4W (NB)	C060047063050	C15
R127-130	244 2052 957	Metal film 5.6kohm 1W (NB)	C060056265070	C16
R135,136	963 9003 068	Metal film 4.7ohm 1/4W (NB)	C0604R7063050	C16
R137-140	244 2043 982	Metal film 0.22ohm 1W (NB)	C060R22065070	C164
R141,142	963 9003 068	Metal film 4.7ohm 1/4W (NB)	C0604R7063050	C16
R143-146	244 2043 982	Metal film 0.22ohm 1W (NB)	C060R22065070	<b>∆</b> C16
R153-156	244 2043 937	Metal oxide 10ohm 1W (NB)	C041010065060	C170
R162-164	244 2055 996	Metal film 1.2kohm 1W (NB)	C060012265050	C174

244 2043 937 Metal oxide 10ohm 1W (NB) C041010065060

R165

The symbols in the column "Remarks" indicate the following destinations.

Ref. No.	Part No.	Part Name	Remarks
R166	244 2043 982	Metal film 0.22ohm 1W (NB)	C060R22065050
R173	963 9003 068	Metal film 4.7ohm 1/4W (NB)	C0604R7063050
R190,191	963 0045 203	Winding 0.1ohm 5W	C144R10069110
R195,196	244 2043 982	Metal film 0,22ohm 1W (NB)	C060R22065050
,			
R208	963 9005 105	Carbon film 68ohm 1/4W	C000068063520
R209	963 0043 108	Metal film 2.2Mohm 1/2W	for E3
			C060022574000
R343,344	244 2043 937	Metal oxide 10ohm 1W (NB)	C041010065060
VR101,102	960 0091 601	Semi fixed resistor 1kohm	C544102015130
	ORS GROU		[Barrana   1997]
C101,102		Electrolytic 22uF/50V	D040220087060
C103,104		Electrolytic 10uF/50V	D040100087070
C105,106	963 9005 118	Ceramic 100pF/50V	D004101067060
C107,108	963 9003 165	Ceramic 220pF/500V	D009092212500
C109,110		Electrolytic 47uF/25V	D040470084070
C111,112	963 9005 121	Ceramic 33pF/500V	D000330067050
C115,116	963 9005 134	Ceramic 1200pF/50V	D004122287050
C117,118		Electrolytic 47uF/50V	D040470087060
C119,120	963 9003 084	Ceramic 100pF/500V	D00410106D050
C121,122		Electrolytic 10uF/50V	D040100087070
C123,124	963 9003 084	Ceramic 100pF/500V	D00410106D050
C125,126	963 9004 517	Ceramic 0.022uF/50V	D004223597050
C127-130	963 9003 097	Mylar film 0.1uF/250V	D02010407H080
C131-134	960 9003 409	Mylar film 0.01uF/50V	for E2
			D020103167050
C135	963 9004 504	Ceramic 0.01uF/50V	D004103097060
C136		Electrolytic 2.2uF/50V	D0402R2087100
C137	963 9004 504	Ceramic 0.01uF/50V	D004103097060
C138,139		Electrolytic 1uF/50V	D040010087080
C140	963 9005 147	Ceramic 0.1uF/25V	D004104594050
C141	200 3003 147	Electrolytic 220uF/6.3V	D040221081230
C141	963 9005 147	Ceramic 0.1uF/25V	D040221081230
C142	505 5005 147	Electrolytic 220uF/6.3V	D040221081230
	063 0005 450	•	
C144,145	963 9005 150	Electrolytic 6800uF/63V	D040681088030
C146-150	963 9003 097	Mylar film 0.1uF/250V	D02010407H080
C151	000 0005 100	Electrolytic 1uF/50V	D040010087080
C152	963 9005 163	Electrolytic 1000uF/50V	D040102087230
C153-155	963 0021 900	Mylar film 0.047uF/100V	D02047306C060
C156	960 9007 201	Electrolytic 3300uF/35V	D040332085010
C157	963 9003 123	Electrolytic 1000uF/35V	D040102085040
C158,159		Electrolytic 10uF/50V	D040100087070
C161		Electrolytic 10uF/50V	D040100087070
C162		Electrolytic 4.7uF/50V	D0404R7087100
C164	963 9003 136	Electrolytic 1000uF/25V	D040102084060
0407400		Electrolytic 1uF/50V	D040010087080
C167,168	to an accommendation of the contract of the co		2***
C167,168 C169	963 9005 176	Ceramic 4700pF/250V (AC)	D008472089010
M. (111111111111111111111111111111111111	963 9005 176 963 9005 299	Ceramic 4700pF/250V (AC) Electrolytic 100uF/100V	D008472089010 D04010108C200

Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks	Q'ty
C175	963 9005 189	Mylar film 2200pF/63V	for E2	<b>∆</b> \T101	960 0185 708	Power trans. (Sub)	for E3	1
			D020222068050				8200280960010	
C178	963 9005 189	Mylar film 2200pF/63V	for E2	<b>∆</b> \T101	960 0185 711	Power trans. (Sub)	for E2	i
			D020222068050		2	16.49	8201280000010	
		0	f F0	TD404 400	000 0101 105	OD connectes been	1 101520140210	2
C300-313	963 9004 520	Ceramic 100pF/50V	for E2	TP101,102	960 0161 405	3P connector base	L101530140310	4
		E) 101 (101 E) 40 E/COV	D005101177520			Lloat sink	2120043538050	1
C314		Electrolytic 10uF/50V	D040100087070	*	000 0040 007	Heat sink	B020030081B10	I I
C315,316	963 9004 504		D004103097060	*	963 0018 007	` '		
C317-321		Electrolytic 10uF/50V	D040100087070	*	963 0068 400	Condenser cover	for E2	1
					000 0000 000	Fuer John (for T101)	4310002640010	
OTHER P.	ARTS GROU	JP		Q'ty *	963 0060 000	Fuse label (for T101)	for E2 5527200040020	1
CN601	960 0129 706	13P connector base	L101352371310	1	,		5527200040020	
CN908	960 0123 304	2P connector base	for E2	1				
			L104353280200					
						,		
CP101	960 0197 505	2P connector base	L108202000220	1				
CP102	960 0123 304	2P connector base	L104353280200	1				
CP103	963 0081 403	4P connector base	L104353280400	1				
CP104	960 0123 207	3P connector base	L102526700300	1				
CP105	960 0123 304	2P connector base	for E2	1				'
			L104353280200					
CP107	960 0123 207	3P connector base	L102526700300	1				
CP608	963 0088 008	10P connector base	L101100041010	1				
CP609	963 0087 805	11P connector base	L101100041110	1				
CP907	963 0048 909	3P connector base	L101220030000	1				
	*****							
<b>⚠</b> F101	960 0188 705	Fuse 8A/125V	for E3	1				
		42	G650802121060					
<b>∆</b> F101	960 0142 602	Fuse T2.5A/250V	for E2	1				
			G650252251160					
<b>△</b> F102	963 0089 803	Fuse 6.3A/125V	for E3	1				
			G650632121150					
<b>1</b> ∆F102	963 0044 709	Fuse T3.15A/250V	for E2	1				
			G650312251160					
F101A,B	960 0005 804	Fuse clip	G645000050010	2				
F102A,B	960 0005 804	Fuse clip	G645000050010	2				
GND101-103	960 9006 600	GND terminal	3790040876010	3				
JACK102		8P speaker terminal	G61408103610A	1				
JACK104	960 0181 508	2P AC outlet	for E3	1				
			G435204004010		1			
	960 0188 200	, -	G602040610000	2				
JACK303	960 0188 307	6P pin jack	G603060610010	1				
L101,102	963 0049 005	Inductor 0.5uH	D330R50000000	2				
DI V404	060 0101 700	Polov (GSDA 29)	G680240502020	1				
RLY101	963 0071 303	Relay (G5PA-28)	G680240202010	1				
RLY102		, , ,		1				
RLY103	960 0181 702		G680240502020	1				
RLY104	900 0 10 1 605	Relay (G5PA-1-8)	G680120502010					1

## FRONT P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks
SEMICON	DUCTORS (	GROUP		R990,991	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
IC600	960 0195 400	IC PC74HC4094D	J040744094020	R993	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
IC601	960 0179 604	IC M62446FP	J084624460010	R995	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
IC602	960 0179 701	IC NJM2068DD	J121206800000				
				R1008	963 9004 245	Carbon chip 2.2Mohm 1/16W	for E2
IC900	963 0089 609	IC CXP82840-321Q	J020828403210				C20002256M160
IC901	963 0081 801	IC TDA7330BD	for E2				
	000 0001 001	10 12/1/00025	J020733000010				
			0020,000000		ORS GROU		T
Q600,601	960 0196 603	Transistor KTC2874B	for E3	C600,601	963 9004 520	·	D005101177520
Q000,001	300 0100 000	Translator Terozoras	J502287400010	C602		Electrolytic 10uF/50V	D040100087070
Q603,604	960 0196 603	Transistor KTC2874B	for E3	C603	963 9004 520	Ceramic 100pF/50V	D005101177520
Q000,004	300 0130 003	Translator RTOZOT+B	J502287400010	C604	960 9003 108	Ceramic 0.022uF/25V	D005223594520
			0302207400010	C605		Electrolytic 47uF/10V	D040470082050
0000	960 0196 409	Transistor 2SC1740SR	J5021740S0010	C606		Electrolytic 4.7uF/50V	D0404R7087100
Q900			J6020144E0010	C607	963 9004 520	Ceramic 100pF/50V	D005101177520
Q901	963 0075 503		J6020114E0010	C608		Electrolytic 4.7uF/50V	D0404R7087100
Q902-904	963 0081 306			C609	963 9004 520	Ceramic 100pF/50V	D005101177520
Q907	963 0081 209	Transistor DTA144ES	J6000144E0010	C610,611		Electrolytic 4.7uF/50V	D0404R7087100
		D. 1. 100100	1/000040000000	C612-615	963 9004 520	Ceramic 100pF/50V	D005101177520
D600	963 0020 309	Diode 1SS133	K000013300520	C616		Electrolytic 0.33uF/50V	D040R33087100
D601	963 0058 407	Diode 1N4007	K000400700520	C617	960 9003 603	Mylar film 0.015uF/50V	D020153167050
D602	963 0020 309	Diode 1SS133	K000013300520	C618	963 9005 079	Mylar film 8200pF/100V	D02082206C060
				C619	-	Electrolytic 47uF/10V	D040470082050
D900-902	963 0020 309	Diode 1SS133	K000013300520	C620,621	963 9004 520	Ceramic 100pF/50V	D005101177520
D903	963 0058 407	Diode 1N4007	K000400700520	C622		Electrolytic 1uF/50V	D040010087080
D904-908	963 0020 309	Diode 1SS133	K000013300520	C623	963 9004 520	Ceramic 100pF/50V	D005101177520
				C624		Electrolytic 0.33uF/50V	D040R33087100
DZ600,601	960 0222 603	Zener diode MTZJ7.5A	K06007R544530	C625	960 9003 603	Mylar film 0.015uF/50V	D020153167050
				C626,627		Electrolytic 3.3uF/50V	D0403R308705C
DZ900,901	960 0095 607	Zener diode MTZJ5.6B	K06005R644520	C628	963 9005 079	Mylar film 8200pF/100V	D02082206C060
DZ902	963 0047 502	Zener diode MTZJ3.3B	K06003R344520	C629		Electrolytic 10uF/50V	for E3
DZ903	960 0095 801	Zener diode MTZJ6.8B	K06006R844520	0020		Liconolytic rour /oct	D040100087070
				C630		Electrolytic 47uF/10V	D040470082050
LED900-902	960 0197 204	LED HL50RDRF4T	K500052015010	C631		Electrolytic 10uF/50V	for E3
				C031		Liectrolytic rour 750 v	D040100087070
FL900	960 0180 509	FLT (16-ST-42GNK)	K530164200010	0000 000		Electrolytic 10uF/50V	D040100087070
				C632,633	000 0005 000		
				C634,635		Ceramic 39pF/50V	D001390067520
RESISTO	RS GROUP			C636	960 9003 108	Ceramic 0.022uF/25V	for E3
R615	244 2052 960	Metal film 220ohm 1W (NB)	C060022165050				D005223594520
R623	244 2052 960	Metal film 220ohm 1W (NB)	C060022165050	C636	963 9004 520	Ceramic 100pF/50V	for E2
					-		D005101177520
R912-914	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C641-644		Electrolytic 10uF/50V	D040100087070
R926-928	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C645,646		Electrolytic 10uF/50V	for E3
R930-932	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160				D040100087070
R936-949	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160				
R951	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C900	963 0021 900	Mylar film 0.047uF/100V	D02047306C060
R953-955	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C901		Electrolytic 1uF/50V	D040010087080
R958	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C902		Electrolytic 47uF/25V	D040470084070
R960	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C903	963 0021 900	Mylar film 0.047uF/100V	D02047306C060
R962-970	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C904-909	963 9004 575	Ceramic chip 100pF/50V	D010101167160
	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160	C910	963 9004 708	Ceramic chip 0.1uF/50V	D011104577160
R977-982		I CALDOLLOLING CONCLINI IT ION				Back up cap. 8200uF/5.5V	

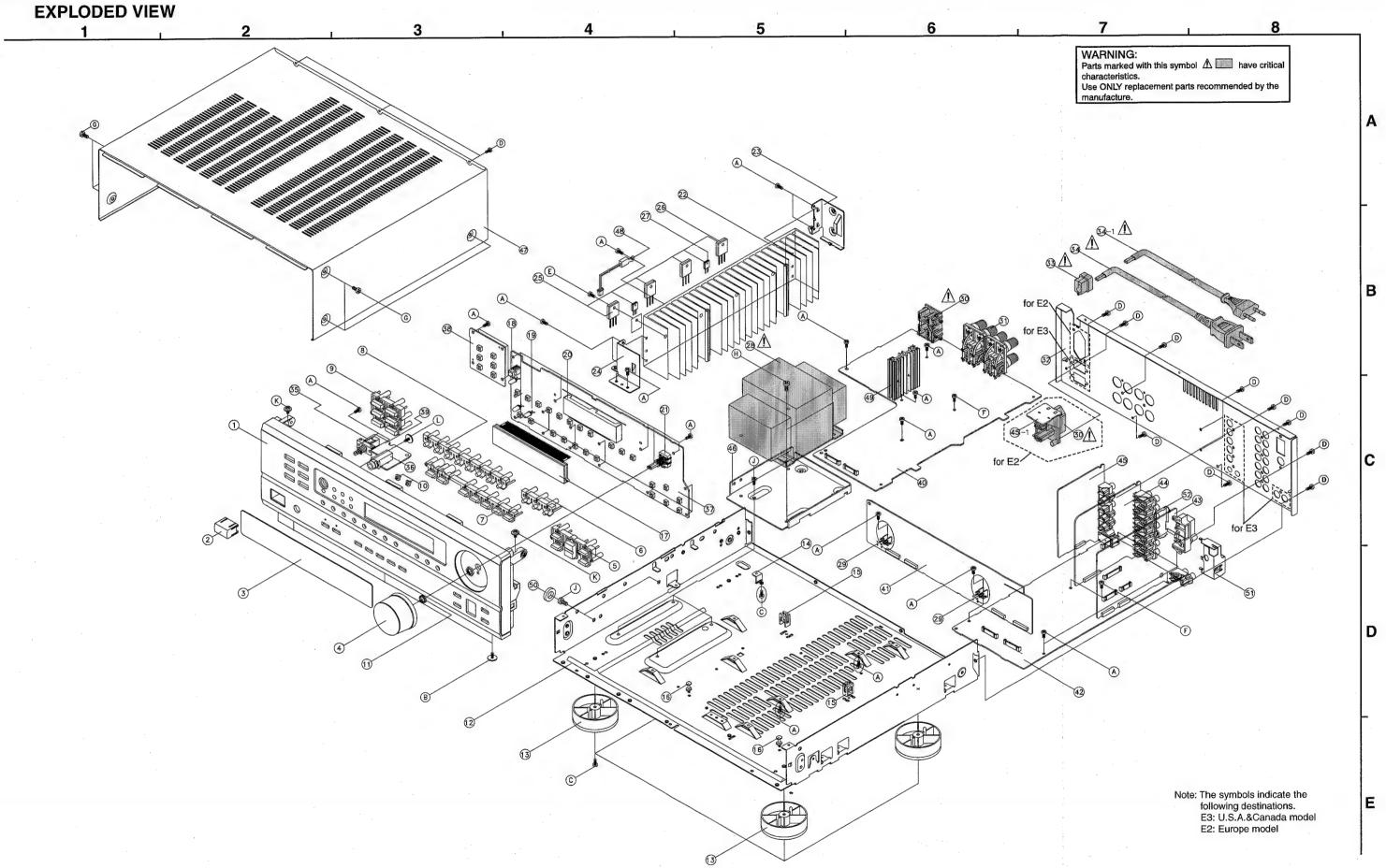
## TUNER P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks		Ref. No.	Part No.	Part Name	Remarks
C912	963 9004 708	Ceramic chip 0.1uF/50V	D011104577160		SEMICON	NDUCTORS (	GROUP	
C913		Electrolytic 4.7uF/50V	D0404R7087100	- 11	IC401	963 0043 700	IC LC72131	J120721310030
C914,915	963 9004 698	Ceramic chip 0.01uF/50V	D011103777160	- 11	IC402	963 0043 904	IC LA1266	J124126600010
C916	963 0021 900	Mylar film 0.047uF/100V	D02047306C060	- 11	IC403	963 0044 000		J124340100010
C918	963 9004 504	Ceramic 0.01uF/50V	D004103097060	- 11			•	
C919		Electrolytic 47uF/50V	D040470087060	- 11	IC500	960 0181 101	IC LA7952	for E3
C920	963 0021 900	Mylar film 0.047uF/100V	D02047306C060	- 11	10000			J171795200000
C921,922	963 9004 614	Ceramic chip 27pF/50V	for E2		IC501	960 0174 104	IC CXA1511M	for E3
			D01027016716C	- 11	10001	000 017 1101	10 0/4/10/11/11	J030151100010
C923	963 9004 504	Ceramic 0.01uF/50V	for E2	. []	IC502	263 0516 001	IC NJM7812FA	for E3
			D004103097060	11	10002	200 0010 001	TO HOMY O'LL' A	J126781200010
C924		Electrolytic 10uF/50V	for E2	- 11		1		0120701200010
		Liberty is real ree	D040100087050	- 11	Q401	063 0058 300	Transistor KTC3880S	J5223880O0210
C925	963 9005 095	Ceramic 270pF/50V	for E2	- 11	Q401 Q402		Transistor DTA114YK	J5200114Y0210
0020	000 0000 000	Octamio 27 opt 700 v	D000271067050	1.1	Q402 Q403,404		Transistor DTA114EK	J5200114T0210
C926		Electrolytic 47uF/25V	for E2	- 11			Transistor KTC2874B	J502287400010
0020		Elootiolytic =/ di /201	D040470084070	- 11	Q405,406 Q407		Transistor NTC2874B	J5220114Y0210
C927	963 9004 698	Ceramic chip 0.01uF/50V	for E2					1
U321	202 2004 080	Gerannic Grip C.O (GF/500)	D011103777160		Q408	963 0058 203		J5200114E0210
C932		Electrolytic 100uF/50V	D040101087060		Q409	963 0058 300	Transistor KTC3880S	for E2
C932	960 0186 503	Electric double layer 0.047F/5.5V		- 11				J5223880O0210
C933	900 0 100 303	Electric double layer 0.047775.5V	D090473904010	- [[			T 1.1. KT00400V	. 50
			D090473904010		Q501	960 0096 813	Transistor KTC3199Y	for E3
								J5023199Y0010
OTHER P	ARTS GROU	JP		Q'ty	Q502	963 0022 006	Transistor DTC114YS	for E3
CN901	963 0071 206	23P FFC connector base	L131520452345	1				J6020114Y0050
				11	Q503	960 0096 813	Transistor KTC3199Y	for E3
CP401	963 0088 008	10P connector base	L101100041010	1				J5023199Y0010
CP601	960 0128 600		L101353361310	111	Q504	963 0022 006	Transistor DTC114YS	for E3
CP602	963 0085 807		L101100040710	111				J6020114Y0050
CP605	963 0085 807	7P connector base	L101100040710	1	Q512	963 0081 209	Transistor DTA144ES	for E3
CP606	963 0088 008		L101100041010	1				J6000144E0010
CP607	963 0087 805		L101100041010	- i I I	Q550	963 0075 309	Transistor DTA114ES	J6000114E0010
CP900		3P connector cord (L=100)	L000101030070	i II				
CP900 CP901		,	L131520442345	i II	D403	960 0197 000	Diode KDS160	K005016000010
		23P FFC connector base (L)	L102526803010	- ; ]]	D404	963 0020 309	Diode 1SS133	K000013300520
CP902	963 0049 102	3P connector base (L)	L102526603010	' []	D405,406	960 0197 000	Diode KDS160	K005016000010
1.000	000 0400 000			. II				
L900	960 0128 008	Inductor 100uH	D330101001020	1	D500	963 0020 309	Diode 1SS133	for E3
			Es 455 4555555	11				K000013300520
REM900	960 0181 100	Remocon sensor NJL64H380A	E940643800000	1	D550	963 0058 407	Diode 1N4007	K000400700520
*****			0.100533333		D551	963 0020 309		K000013300520
	960 0194 207		G180000270010	24	D552	963 0058 407	Diode 1N4007	K000400700520
SW924	960 0181 207	Rotary encoder (EC16B2420431)	G121162420400	1				
					DZ401	960 0095 500	Zener diode MTZJ5.1B	K06005R144520
XTAL900	960 0112 001	Ceramic resonator	CST10.0MGW-TF01	1				
			E830100000050		DZ501	960 0095 704	Zener diode MTZJ6.2B	for E3
XTAL901	960 0091 818	Crystal 4.332MHz	for E2	1	D2301	000 0000 704	201101 GIOGO 1811 200,20	K06006R244520
			E8004R3320051					100000011244020
					1			
*	960 0184 408	FLT holder	4320200026000	1   [	RESISTO	RS GROUP		
				11	R401	963 9004 821	Carbon chip 10ohm 1/16W	C20001006M160
					R403	963 9004 339	Carbon chip 470ohm 1/16W	C20004716M160
		1		- 11	R404		Carbon chip 100kohm 1/16W	C20001046M160

Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks
R405	960 9003 807	Metal film 100ohm 1/4W (NB)	C060010163050	R450	963 9003 398	Carbon chip 1kohm 1/16W	for E2
R406	963 9004 342	Carbon chip 4.7kohm 1/16W	C20004726M160				C20001026M160
R407	963 9004 339	Carbon chip 470ohm 1/16W	for E3	R455	963 9004 876	Carbon chip 330ohm 1/16W	C20003316M160
			C20004716M160	R456	963 9003 385	Carbon chip 100ohm 1/16W	C20001016M160
R407	963 9005 008	Carbon chip 620ohm 1/16W	for E2	R458,459	963 9004 342	Carbon chip 4.7kohm 1/16W	C20004726M160
			C20006216M160	R462,463	963 9004 083	Carbon chip 100kohm 1/16W	for E3
R408	963 9004 119	Carbon chip 1.2kohm 1/16W	for E3				C20001046M160
			C20001226M160	R467,468	963 9004 203	Carbon chip 220ohm 1/16W	for E3
R408	963 9004 436	Carbon chip 680ohm 1/16W	for E2				C20002216M160
			C20006816M160	R470	963 9003 398	Carbon chip 1kohm 1/16W	C20001026M160
R409	963 9004 339	Carbon chip 470ohm 1/16W	C20004716M160	R471VT	963 9004 203	Carbon chip 220ohm 1/16W	C20002216M160
R411	963 9005 011	Carbon chip 68kohm 1/16W	C20006836M160	R472	963 9003 385	Carbon chip 100ohm 1/16W	for E2
R412	963 9004 834	Carbon chip 5.6kohm 1/16W	C20005626M160			. *	C20001016M160
R413	960 9006 503	Metal film 220ohm 1/4W (NB)	C060022163050	R473	963 9003 372	Carbon chip 0ohm 1/16W	for E3
R414	963 9004 216	Carbon chip 2.2kohm 1/16W	C20002226M160				C20000006M160
R415	963 9003 398	Carbon chip 1kohm 1/16W	C20001026M160	R473	963 9005 040	Carbon chip 2.4kohm 1/16W	for E2
R416	963 9005 024	Metal film 680ohm 1/4W (NB)	C060068163050				C20002426M160
R417	963 9003 398	Carbon chip 1kohm 1/16W	C20001026M160	R474	963 9004 889	Carbon chip 180ohm 1/16W	for E2
R418	963 9004 274	Carbon chip 33kohm 1/16W	C20003336M160				C20001816M160
R420	963 9004 847	Carbon chip 3.3kohm 1/16W	C20003326M160	R475	963 9004 122	Carbon chip 12kohm 1/16W	C20001236M160
R426,427	963 9004 070	Carbon chip 10kohm 1/16W	C20001036M160	R476	963 9004 397	Carbon chip 56kohm 1/16W	C20005636M160
R428	963 9004 847	Carbon chip 3.3kohm 1/16W	for E3	R478	963 9004 070	Carbon chip 10kohm 1/16W	C20001036M160
			C20003326M160	R479	963 9004 083	Carbon chip 100kohm 1/16W	C20001046M160
R428	963 9004 070	Carbon chip 10kohm 1/16W	for E2	R491	963 9004 229	Carbon chip 22kohm 1/16W	C20002236M160
			C20001036M160				
R429	963 9004 850	Carbon chip 82ohm 1/16W	C20008206M160	R1024,1025	963 0048 006	Metal film 330ohm 2W	C060033166520
R430	963 9003 807	Metal film 100ohm 1/4W (NB)	C060010163050				
R431	963 9004 371	Carbon chip 5.1kohm 1/16W	C20005126M160	VR401	960 0096 606	Semi fixed resistor 20kohm	C541203115000
R432	963 9004 070	Carbon chip 10kohm 1/16W	C20001036M160	VR402	963 0056 205	Semi fixed resistor 50kohm	for E3
R434	963 9003 807	Metal film 100ohm 1/4W (NB)	C060010163050				C541503115000
R435	963 9004 847	Carbon chip 3.3kohm 1/16W	C20003326M160	VR402	960 0096 402	Semi fixed resistor 100kohm	for E2
R437	963 9004 083	Carbon chip 100kohm 1/16W	C20001046M160				C541104115000
R438,439	963 9004 083	Carbon chip 100kohm 1/16W		VR403	963 0052 005	Semi fixed resistor 200kohm	C541204115000
			C20001046M160				
R438,439	963 9004 164	Carbon chip 150kohm 1/16W	for E2	CAPACIT	ORS GROUP	•	,
			C20001546M160	C401,402		Ceramic chip 1000pF/50V	D011102777160
R440,441	963 9004 863	Carbon chip 120kohm 1/16W		C403		Ceramic chip 0.022uF/25V	D011223777160
			C20001246M160	C404		Ceramic 2pF/50V	D000020007050
R440,441	963 9004 232	Carbon chip 220kohm 1/16W	for E2	C405		Ceramic chip 0.022uF/25V	D011223777160
			C20002246M160	C406	963 9004 902	Ceramic chip 18pF/50V	D010180167160
R442,443	963 9004 847	Carbon chip 3.3kohm 1/16W	for E3	C408	960 9004 709	Ceramic 6pF/50V	D000060007050
D/40 ***	000 0004 515	Onder the Ook I waste	C20003326M160	C409	963 9004 520	Ceramic 100pF/50V	D005101177520
R442,443	963 9004 216	Carbon chip 2.2kohm 1/16W	for E2	C410	963 9004 915	Ceramic 470pF/50V	D005471277520
D441.415	000 000 1 101	0-1	C20002226M160	C411	963 9004 685	Ceramic chip 1000pF/50V	D011102777160
R444,445	963 9004 481	Carbon chip 8.2kohm 1/16W	for E3	C412	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160
D.44	200 200 1 7 1	0.1	C20008226M160	C413	963 9004 575	Ceramic chip 100pF/50V	D010101167160
R444,445	963 9004 847	Carbon chip 3.3kohm 1/16W	for E2	C414		Electrolytic 2.2uF/50V	D0402R2087100
D440	000 000 4 040	Oanham albit o of the street	C20003326M160	C415		Electrolytic 47uF/25V	D040470084070
R448	963 9004 216	Carbon chip 2.2kohm 1/16W	C20002226M160	C416		Electrolytic 10uF/50V	D040100087050
R449	963 9005 037	Carbon chip 3.9kohm 1/16W	for E2	C417		Electrolytic 100uF/16V	D040101083100
			C20003926M160	C418	963 9004 698	Ceramic chip 0.01uF/50V	D011103777160
						,	
		!					

Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks	3
C419	•	Electrolytic 10uF/50V	D040100087050	C506,507	963 9004 562	Ceramic 0.047uF/50V	for E3	
C420	963 9004 591	Ceramic chip 22pF/50V	D010220167160				D005473597520	
C421	963 9004 928	Ceramic chip 24pF/50V	D010240167200	C508		Electrolytic 100uF/10V	for E3	
C422	963 9004 656	Ceramic chip 470pF/50V	D010471167160				D040101083100	
C423,424	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160	C509	963 9004 504	Ceramic 0.01uF/50V	for E3	
C425		Electrolytic 4.7uF/50V	D0404R7087100				D004103097060	
C426		Electrolytic 3.3uF/50V	D0403R3087100	C510	963 9004 520	Ceramic 100pF/50V	for E3	
C427		Electrolytic 4.7uF/50V	D0404R7087100			·	D005101177520	,
C428	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160	C511	960 9008 653	Mylar film 0.012uF/100V	for E3	
C430	963 0021 900	Mylar film 0.047uF/100V	D02047306C060				D02012306C060	)
C431	963 9004 627	Ceramic chip 33pF/50V	D010330167160	C512		Electrolytic 1uF/50V	for E3	
C432		Electrolytic 47uF/25V	D040470084070				D040010087050	
C433	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160	C513	960 9008 653	Mylar film 0.012uF/100V	for E3	
C434		Electrolytic 1uF/50V	for E3			,	D02012306C060	)
0101		Liound, and rain out	D040010087080	C514		Electrolytic 47uF/25V	for E3	
C434		Electrolytic 0.33uF/50V	for E2				D040470084070	,
0404		Licotrolytic ciccum 7007	D040R33087100	C515		Electrolytic 1uF/50V	for E3	
C435,436	963 9004 737	Ceramic chip 0.022uF/25V	D011223777160				D040010087050	,
C437	300 3004 707	Electrolytic 47uF/25V	D040470084070	C516		Electrolytic 10uF/50V	for E3	
C437		Electrolytic 1uF/50V	D040010087080	0010		Libotrolytic Todi 7001	D040100085050	,
C439		Electrolytic 0.22uF/50V	D040R22087100	C550		Electrolytic 0.1uF/50V	D040R10087070	
C439		Electrolytic 1uF/50V	D040010087080	C551		Electrolytic 100uF/25V	D040101084060	
		,	D040010087080 D0402R2087100	0331		Liediolyllo 1000i /25v	D040101004000	
C442	1	Electrolytic 2.2uF/50V	D0402H2087100	C928,929	963 9004 533	Ceramic 1000pF/50V	D005102177530	
C443		Electrolytic 10uF/50V		C920,929	960 9003 108	Ceramic 0.022uF/25V	D005702177530	
C444		Electrolytic 4.7uF/50V	D0404R7087100	C930	900 9003 100	Electrolytic 1uF/50V	D040010087080	
C445	000 0005 050	Electrolytic 10uF/50V	D040100087050	C931		Electrolytic Tai 750V	D040010087080	
C446,447	963 9005 053	Ceramic 270pF/50V	for E3					
0440 447	000 0005 000	O	D004271277050	OTHER P	ARTS GROU	JP .		G,
C446,447	963 9005 066	Ceramic 330pF/50V	for E2	CF401,402	960 0187 104	Ceramic filter SFE10.7MA8	for E3	
0440 440	000 0004 000	0	D004331277050				E430107000140	
C448,449	963 9004 960	Ceramic 470pF/50V	for E3	CF401,402	960 0177 509	Ceramic filter SFE10.7MS3	for E2	;
		E	D004471067060				E430107000150	
C450,451		Electrolytic 10uF/50V	D040100087050	CF403	960 0187 609	Ceramic resonator BFU450C	E830450000070	
C453	963 9004 614		D010270167160					
C454,455	963 9004 575	Ceramic chip 100pF/50V	for E3	CN401	963 0085 409	10P connector base	L101100031010	
			D010101167160	CN602	963 0086 505	7P connector base	L101100030710	
C456	963 9004 672	Ceramic chip 680pF/50V	D010681167160	CN605		7P connector base	for E3	
C459		Electrolytic 1uF/50V	for E3				L101100030710	
			D040010087080	CN606	963 0085 409	10P connector base	L101100031010	1
C461	963 9004 591	Ceramic chip 22pF/50V	D010220167160	CN607	963 0086 709	11P connector base	L101100031110	1
C462	963 9004 656	Ceramic chip 470pF/50V	for E2	CN608	963 0085 409		L101100031010	1
			D010471167160	CN609	963 0086 709	11P connector base	L101100031110	1
C463	963 9004 782	Mylar film 0.056uF/100V	D02056306C060	CN907	963 0089 308	3P connector cord (L=400)	L000401030020	1
C464	963 9004 973	Ceramic 3pF/50V	D000030007050	011307	500 0000 000	or connector cora (E=100)	2000101000020	
C471VT		Electrolytic 1uF/50V	D040010087080	CP900	063 0040 008	3P connector base	L101220030010	
C472VT	963 9004 753	Ceramic chip 0.047uF/50V	D011473597160	CP900 CP903	1	2P connector cord (L=80)	L000800020060	1
				1 1		2P connector cord (L=120)	for E2	
C500-502		Electrolytic 47uF/25V	for E3	CP905	903 0089 405	ZE CONNECTO COM (L=120)		1
			D040470084070	OD000	000 0040 000	2D connector base	L000121020050	1
C503,504		Electrolytic 470uF/10V	for E3	CP906	963 0048 909	3P connector base	for E3	
			D040471081230	0.000		op	L101220030000	1
	1			CP906	963 0089 502	2P connector cord (L=350)	for E2	
	1						L000351020070	1

G401 — 1P Wire (L=80) 8410800010010 1		Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. No.	Part No.	Part Name	Remarks	Q'ty
Gel11	Ì	FE401	960 0187 706	Tuner pack	E900401010020	1	X402	963 0043 302	Ceramic resonator	CSB456F11	1
G800	ı									E830456000050	
JA01,402   963,903,368   Carbon chip 0ohtm 1/8W   C200000061300   2   2   2   2   2   2   2   2   2	I	G401	_	1P Wire (L=80)	8410800010010	1					
Jad J. 402   963 9003 969   Carbon chip Onthm 18W   Carbono061900   2 for E3   1 for E	Į	G900	-	1P Wire (L=80)	8410800010010	1	*	963 0054 003	Shield cover	3070210056000	1
Jad 1,402         963 9003 989         Carbon chip Ohm 1/8W         C200000061300         2           J403,404         963 9003 989         Carbon chip Ohm 1/8W         for E3         2           C200000061300         2         Carbon chip Ohm 1/8W         for E3         2           J405,400         963 9003 989         Carbon chip Ohm 1/8W         C200000061300         1           J409         963 9003 989         Carbon chip Ohm 1/8W         C200000061300         1           JACK401         980 1018 066         2P pin jack         for E3         1           JACK402         983 0032 493         3P antenna terminal         G80302108010         1           JACK402         980 0188 444         3P pin jack         for E3         1           JACK503         980 0194 665         2P pin jack         for E3         1           JACK909         960 0187 552         Headphone jack (D6.5)         J660020183010         1           L401,402         963 0052 102         Inductor full         D330118000120         2           L403         963 0054 708         Tact switch         G180000270010         1           SW925         963 0055 708         Tact switch         G1800000270010         1           SW9329	I			•			*	963 0088 406	Earth plate C	4470210206000	1 1
JA05,406   963 9003 369   Carbon chip Oohm 1/8W   Ca20000061300   2   2   2   2   2   2   3   4   5   5   5   5   5   5   5   5   5	ı	J401,402	963 9003 369	Carbon chip 0ohm 1/8W	C200000061300	2		960 0184 000	Screw bracket	4010210196000	2
J405,406   963,9003,969   Carbon chip Ochm 1/8W   for E2   2   C20000061300   1	l	J403,404	963 9003 369	Carbon chip 0ohm 1/8W	for E3	2					
J407   963 9003 368   Carbon chip 0ohm 1/8W   C200000061300   1	١				C200000061300						
J407   983 903 368   Carbon chip 0ohm 1/8W   C200000061300   1	ı	J405,406	963 9003 369	Carbon chip 0ohm 1/8W	for E2	2					
JACK401 960 0188 006 2P pin jack for E3 1 Geofot20170000 1 JACK402 983 0052 403 3P antenna terminal G593021088010 1 JACK502 980 0188 404 3P pin jack for E3 1 Geofot20170000 JACK503 980 0188 404 3P pin jack for E3 1 Geofot20170000 JACK503 980 0188 404 3P pin jack for E3 1 Geofot30164020 JACK503 980 0187 502 Pin jack for E3 1 Geofot30164020 JACK503 980 0187 502 Pin jack for E3 1 Geofot30164020 JACK503 JAC	1				C200000061300		1			1	1 1
JACK401 960 0188 006 2P pin jack for E3 G601020170000 JACK402 963 0052 403 3P antenna terminal G593021068010 1 G401066020000 JACK502 960 0188 404 3P pin jack for E3 G606030164020 JACK503 960 0194 605 ZP pin jack for E3 JG606030164020 JACK503 960 0194 605 ZP pin jack for E3 JG606030164020 JACK503 960 0195 ZP pin jack for E3 JG606030164020 JACK503 960 0195 ZP pin jack for E3 JG606030164020 JACK503 960 0195 ZP pin jack for E3 JG606030164020 JACK503 960 0195 ZP pin jack for E3 JG606030164020 JACK503 960 0195 ZP pin jack for E3 JG601020163010 JACK503 963 0056 402 MW IFT (FIBW07VB-K5025) D96060050010 1 JG607020 JACK503 J	I	J407	963 9003 369	Carbon chip 0ohm 1/8W	C200000061300	1	1		,		
JACK402   963 0052 403   3P antenna terminal   G60 1020 170000   1   1   1   1   1   1   1   1   1	l	J409	963 9003 369	Carbon chip 0ohm 1/8W	C200000061300	1					
JACK402   963 0052 403   3P antenna terminal   G60 1020 170000   1   1   1   1   1   1   1   1   1	ı										
JACK402	ı	JACK401	960 0188 006	2P pin jack							1
JACK501 963 0071 002 Mini jack for E3 1 (ad01065020000 1 ) JACK502 960 0188 404 3P pin jack for E3 (ad01065020000 1 ) JACK503 960 0194 605 2P pin jack for E3 1 (a601020163010 ) JACK900 960 0187 502 Headphone jack (D8.5) G402038400031 1 ) L401,402 963 0052 102 Inductor 1uH D3301R0001020 2 (ad010650200000 ) JACK509 960 0143 203 AC outlet for E2 1 (ad0500000000000000000000000000000000000	Ì					1	i			1	1
JACK502 960 0188 404 3P pin jack for E3 1 G660630164020 1	ı										
JACK502 960 0188 404 3P pin jack for E3 1 G606030164020 for E3 1 G405040110000 for E3 1 G4050401100000 for E3 1 G4050	١	JACK501	963 0071 002	Mini jack							
JACK503 960 0194 605 2P pin jack for E3 1 G801020183010 1    JACK900 960 0187 502    L401,402 963 0052 102   L403 963 0052 102   MW IFT (RBW07VB-K5025)    D950500500010 1    ACUITLE909 960 0143 203    AC outlet for E2 1 G435040110000    SW925 963 0045 708   SW927 963 0045 708   SW929 960 0176 209    SW929 960 0176 209    SW929 963 0056 603    SW929 963 0045 708   SW929 963 0045 708   SW929 963 0045 708    SW930 963 0045 708    SW930 963 0045 708    SW932 963 0045 708    Tact switch G180000270010 1    G0000122000010    SW930 963 0045 708    Tact switch G180000270010 1    G0000122000010    SW930 963 0045 708    Tact switch G180000270010 1    Tact switch G18000000000000000000000000000000000000	I	14.01/200	200 0400 404	OD ele le ele							
JACK503 960 0194 605 JACK500 960 0187 502 L401,402 963 0052 102 L403 963 0056 409  \[ \begin{array}{cccccccccccccccccccccccccccccccccccc	Į	JACK502	960 0188 404	3P pin jack		1					
JACK900   S60 0187 502   Headphone jack (D6.5)   G601020163010   G402038400031   1	l	IACKEDO	000 0104 005	OD nin icele		1	ł				
JACK900   960 0187 502   Headphone jack (D6.5)   G402039400031   1	ı	JACKSUS	960 0194 605	2P pin jack		'					
L401,402	١	IVCK000	060 0197 500	Hoodobana jaak (D6.5)							
L403 963 0056 409 MW IFT (RBW07VB-K5025) D95050050010 1  A COUTLE909 960 0143 203 AC outlet for E2 1 G435040110000 1  SW925 963 0045 708 Tact switch G180000270010 1 SW929 960 0176 209 Push switch for E3 1 G000122000010 SW929 963 0056 603 Push switch for E2 1 G000040890000 SW930 963 0045 708 Tact switch G180000270010 1 SW932 963 0045 708 Tact switch G180000270010 1 SW934 963 0045 708 Tact switch G180000270010 1 SW936 963 0045 708 Tact switch G180000270010 1 SW937 963 0045 708 Tact switch G180000270010 1 SW938 963 0045 708 Tact switch G180000270010 1 T401 960 0186 600 MW IFT (PCFMAF-270) D95050020000 1 T402 960 0007 349 FM DET trans. D951561100000 1 T403 960 0007 352 FM DET trans. D951561200000 1 T406 960 0037 607 Antibirdie filter for E2 2 E401500100000 T406 960 0037 607 Antibirdie filter for E2 2 E401500100000	I	JACKSOO	900 0107 302	neauphone jack (Do.5)	G402038400031	'					
L403 963 0056 409 MW IFT (RBW07VB-K5025) D95050050010 1  A COUTLE909 960 0143 203 AC outlet for E2 1 G435040110000 1  SW925 963 0045 708 Tact switch G180000270010 1 SW929 960 0176 209 Push switch for E3 1 G000122000010 SW929 963 0056 603 Push switch for E2 1 G000040890000 SW930 963 0045 708 Tact switch G180000270010 1 SW932 963 0045 708 Tact switch G180000270010 1 SW934 963 0045 708 Tact switch G180000270010 1 SW936 963 0045 708 Tact switch G180000270010 1 SW937 963 0045 708 Tact switch G180000270010 1 SW938 963 0045 708 Tact switch G180000270010 1 T401 960 0186 600 MW IFT (PCFMAF-270) D95050020000 1 T402 960 0007 349 FM DET trans. D951561100000 1 T403 960 0007 352 FM DET trans. D951561200000 1 T406 960 0037 607 Antibirdie filter for E2 2 E401500100000 T406 960 0037 607 Antibirdie filter for E2 2 E401500100000	١	1401 402	963 0052 102	Inductor 1uH	D3301B0001020	2	·		·		
Accounted   Acco	1										
SW925 963 0045 708 Tact switch G180000270010 1 SW929 960 0176 209 Push switch G000122000010 SW929 963 0056 603 Push switch G180000270010 1 SW930 963 0057 708 Tact switch G180000270010 1 SW932 963 0057 708 Tact switch G180000270010 1 SW932 963 0057 708 Tact switch G180000270010 1 SW934 963 0045 708 Tact switch G180000270010 1 SW936 963 0045 708 G180000270010 1 Tact switch G18000000000000000000000000000000000000	l	2100	000 0000 100	111111111111111111111111111111111111111	200000000000000000000000000000000000000						
SW925 963 0045 708 Tact switch G180000270010 1 SW929 960 0176 209 Push switch G000122000010 SW929 963 0056 603 Push switch G180000270010 1 SW930 963 0057 708 Tact switch G180000270010 1 SW932 963 0057 708 Tact switch G180000270010 1 SW932 963 0057 708 Tact switch G180000270010 1 SW934 963 0045 708 Tact switch G180000270010 1 SW936 963 0045 708 G180000270010 1 Tact switch G18000000000000000000000000000000000000	١	⚠ OUTLE909	960 0143 203	AC outlet	for E2	1					
SW927       963 0045 708       Tact switch       G180000270010       1         SW929       960 0176 209       Push switch       for E3       1         G000122000010       G000040890000       1       G000040890000         SW930       963 0045 708       Tact switch       G180000270010       1         SW932       963 0045 708       Tact switch       G180000270010       1         SW934       963 0045 708       Tact switch       G180000270010       1         SW936       963 0045 708       Tact switch       G180000270010       1         T401       960 0186 600       MW IFT (PCFMAF-270)       D950500200000       1         T402       960 0007 349       FM DET trans.       D951561100000       1         T403       960 0007 352       FM DET trans.       D951561200000       1         T404,405       960 0071 207       MPX filter       for E2       2         E401500100000       Tact Sutton       Tact Sutton       FM DET trans.       D951561200000       1         T406       960 0037 607       Antibirdie filter       for E2       1       1	ı			i de la filia de l	G435040110000						
SW927       963 0045 708       Tact switch       G180000270010       1         SW929       960 0176 209       Push switch       for E3       1         G000122000010       G000040890000       1       G000040890000         SW930       963 0045 708       Tact switch       G180000270010       1         SW932       963 0045 708       Tact switch       G180000270010       1         SW934       963 0045 708       Tact switch       G180000270010       1         SW936       963 0045 708       Tact switch       G180000270010       1         T401       960 0186 600       MW IFT (PCFMAF-270)       D950500200000       1         T402       960 0007 349       FM DET trans.       D951561100000       1         T403       960 0007 352       FM DET trans.       D951561200000       1         T404,405       960 0071 207       MPX filter       for E2       2         E401500100000       Tact Sutton       Tact Sutton       FM DET trans.       D951561200000       1         T406       960 0037 607       Antibirdie filter       for E2       1       1	١								-		
SW929         960 0176 209         Push switch         for E3 G000122000010         1           SW929         963 0056 603         Push switch         for E2 IG000040890000         1           SW930         963 0045 708         Tact switch         G180000270010 IG010         1           SW932         963 0045 708         Tact switch         G180000270010 IG010         1           SW934         963 0045 708         Tact switch         G180000270010 IG010         1           T401         960 0186 600 IG010         MW IFT (PCFMAF-270)         D950500200000 IG010         1           T402         960 0007 349 IG010         FM DET trans.         D951561100000 IG010         1           T403         960 0007 352 IG010         FM DET trans.         D951561200000 IG010         1           T404,405         960 0071 207         Antibirdie filter         for E2 IG0100000 IG010         1           T406         960 0037 607         Antibirdie filter         for E2 IG0100000 IG010         1	l	SW925	963 0045 708	Tact switch	G180000270010	1					
SW929       963 0056 603       Push switch       G000122000010 for E2 for E2 for E2       1 G000040890000 for E2 for E2 for E2 for E2       1 G000040890000 for E2 f	Ì	SW927	963 0045 708	Tact switch	G180000270010	1					
SW929       963 0056 603       Push switch       for E2 (G000040890000)       1         SW930       963 0045 708       Tact switch       G180000270010 1       1         SW932       963 0045 708       Tact switch       G180000270010 1       1         SW934       963 0045 708       Tact switch       G180000270010 1       1         T401       960 0186 600       MW IFT (PCFMAF-270)       D9505002000000 1       1         T402       960 0007 349       FM DET trans.       D951561100000 1       1         T403       960 0007 352       FM DET trans.       D951561200000 1       1         T404,405       960 0071 207       MPX filter       for E2 2       2         E401500100000       Texture filter       FM DET trans.       Texture filter         T406       960 0037 607       Antibirdie filter       for E2 1       1	ı	SW929	960 0176 209	Push switch	for E3	1	11			1	
SW930 963 0045 708 Tact switch G18000270010 1 SW932 963 0045 708 Tact switch G18000270010 1 SW934 963 0045 708 Tact switch G180000270010 1 SW936 963 0045 708 Tact switch G180000270010 1 T401 960 0186 600 MW IFT (PCFMAF-270) D950500200000 1 T402 960 0007 349 TM DET trans. D951561100000 1 T403 960 0007 352 TM DET trans. D951561200000 1 T404,405 960 0071 207 MPX filter for E2 E401500100000 T406 960 0037 607 Antibirdie filter for E2 E401500100000	١				G000122000010		ii				
SW930       963 0045 708       Tact switch       G180000270010       1         SW932       963 0045 708       Tact switch       G180000270010       1         SW934       963 0045 708       Tact switch       G180000270010       1         SW936       963 0045 708       Tact switch       G180000270010       1         T401       960 0186 600       MW IFT (PCFMAF-270)       D950500200000       1         T402       960 0007 349       FM DET trans.       D951561100000       1         T403       960 0007 352       FM DET trans.       D951561200000       1         T404,405       960 0071 207       MPX filter       E401500100000         T406       960 0037 607       Antibirdie filter       for E2       2         E403126832410       1       E403126832410	ı	SW929	963 0056 603	Push switch	for E2	1					
SW932       963 0045 708       Tact switch       G180000270010       1         SW934       963 0045 708       Tact switch       G180000270010       1         SW936       963 0045 708       G180000270010       1         T401       960 0186 600       MW IFT (PCFMAF-270)       D950500200000       1         T402       960 0007 349       FM DET trans.       D951561100000       1         T403       960 0007 352       FM DET trans.       D951561200000       1         T404,405       960 0071 207       MPX filter       for E2       2         E401500100000       1       E403126832410       1	ı				G000040890000					j	
SW934       963 0045 708       Tact switch       G180000270010       1         SW936       963 0045 708       Tact switch       G180000270010       1         T401       960 0186 600       MW IFT (PCFMAF-270)       D950500200000       1         T402       960 0007 349       FM DET trans.       D951561100000       1         T403       960 0007 352       FM DET trans.       D951561200000       1         T404,405       960 0071 207       MPX filter       for E2       2         E401500100000       1       E403126832410       1	ı										
SW936       963 0045 708       Tact switch       G180000270010       1         T401       960 0186 600       MW IFT (PCFMAF-270)       D950500200000       1         T402       960 0007 349       FM DET trans.       D951561100000       1         T403       960 0007 352       FM DET trans.       D951561200000       1         T404,405       960 0071 207       MPX filter       for E2       2         E401500100000       E401500100000       1         T406       960 0037 607       Antibirdie filter       for E2       1         E403126832410       E403126832410	١					1					
T401 960 0186 600 MW IFT (PCFMAF-270) D950500200000 1 D951561100000 1 D951561100000 1 D951561200000 1 D95156120000 1 D951561200000 1 D951561200000 1 D951561200000 1 D95156120000 1 D95156120000 1 D9515612000	١							İ		1	
T402       960 0007 349       FM DET trans.       D951561100000       1         T403       960 0007 352       FM DET trans.       D951561200000       1         T404,405       960 0071 207       MPX filter       for E2       2         E401500100000       for E2       1         E403126832410       1       E403126832410	Į	SW936	963 0045 708	Tact switch	G180000270010	1				,	
T402       960 0007 349       FM DET trans.       D951561100000       1         T403       960 0007 352       FM DET trans.       D951561200000       1         T404,405       960 0071 207       MPX filter       for E2       2         E401500100000       for E2       1         E403126832410       1       E403126832410		T404	000 0400 051	MW IET (DOELLAS 070)	DOFOCOCOCO						<b> </b>
T403 960 0007 352 FM DET trans. D951561200000 1 for E2 2 E401500100000 for E2 1 E403126832410											
T404,405 960 0071 207 MPX filter for E2 2 E401500100000 for E2 1 E403126832410											
T406 960 0037 607 Antibirdie filter E401500100000 for E2 1 E403126832410					í	1 1					
T406 960 0037 607 Antibirdie filter for E2 1 E403126832410	1	1404,405	900 00/ 1 20/	I WIF A TISLES	1	2					
E403126832410		TAGE	960 0037 607	Antihirdia filter		1					
		1400	300 0037 007	Cumplinia nital							
X401 960 0187 405 Crystal 7.2MHz E8007R2000071 1			,		- TOO 1200027 TV		1				
		X401	960 0187 405	Crystal 7.2MHz	E8007R2000071	1	1			1	<b> </b>
			300 3107 400	- /							
	1										



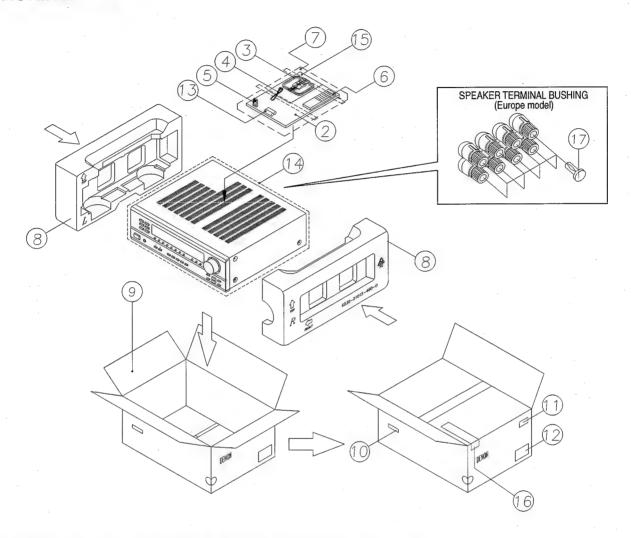
## PARTS LIST OF EXPLODED VIEW

Note: The symbols in the column "Remarks" indicate the following destinations. E3: U.S.A./Canada model E2: Europe model

Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. No.	Part No.	Part Name	Remarks	Q'
101.110.	963 0080 802	Main P.W.B. unit Ass'y	for E3	1	22	Tartito.	Heat sink (main)	2120210298100Z	٦
	303 0000 002	Wall 1 . W.D. dill A33 y	7025HK0011010		23	960 0184 204	Heat sink (main)	4010210386000	
	062 0000 015	Main P.W.B. unit Ass'y	for E2	1	23	960 0184 204	Heat sink bracket F	4010210396000	
	963 0080 815	Watti F.W.D. unit ASS y	7025HK0011020	'			Transistor 2SB1559Y		2
40		Main D.W.R. unit	7025FIK0011020		25	960 0090 107	Transistor 25015591	Q113,114	'
上40		Main P.W.B. unit			00	000 0000 000	Transister OCDOCCOV	J5011559Y1170	Ι,
L 44		Input P.W.B. unit			26	960 0090 000	Transistor 2SD2389Y	Q111,112	2
		5 . DWB	, 50					J5032389Y1170	1.
	963 0080 909	Front P.W.B. unit Ass'y	for E3	1	27	963 0058 106	Transistor 2SD947F	Q109,110	2
_			7025HK0011011					J503947F00000	
	963 0080 912	Front P.W.B. unit Ass'y	for E2	1	<i>∆</i> ∆ 28	963 0088 901	Power trans.	for E3	
			7025HK0011021					8200858630100	
37		Front P.W.B. unit			<i>1</i> 1∆ 28	963 0088 914	Power trans.	for E2	
42		Volume P.W.B. unit						8200858630110	
					29	960 0184 000	Screw bracket	4010210196000	
	963 0081 005	Tuner P.W.B. unit Ass'y	for E3	1	<b>∆</b> \ 30	960 0181 508	2P AC outlet	JACK104, for E3	
			7025HK0011012					G435204004010	
	963 0081 018	Tuner P.W.B. unit Ass'y	for E2	1	<i>∆</i> \ 30	960 0143 203	AC outlet	OUTLE909, for E2	
			7025HK0011022			132		G435040110000	
r 38		Switch P.W.B. unit			31	963 0089 201	8P speaker terminal	JACK102	
39		Power SW/HP P.W.B. unit						G61408103610A	
41		Connector P.W.B. unit			32	963 0076 502	Back panel	for E3	
43		Tuner P.W.B. unit						3207210766600	ŀ
45		Video P.W.B. unit	for E3	1 1	32	963 0076 515	Back panel	for E2	
45-1	1	Outlet P.W.B. unit	for E2	1	02	000 0010 010	Basin parior	3207210766700	
-40-1			101 LZ		<b>∆</b> \ 33	960 0192 403	Cord bush	4380210002000	
					<u>4</u> ∆ 34	960 0166 400	S-1-000 MM -	for E3	
1	963 0076 308	Eront nanol	for E3		21 34	300 0 100 400	AO 6014	L068020030010	
ı	963 0076 306	Front paner		'		000 0000 500	AC soul	1 X 4 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	
	000 0070 044	Foodsess	3067210261040Z		△ 34-1	960 0202 500	AC cord	for E2	1
1	963 0076 311	Front panel	for E2	1	-		B 1 21	L068040011010	
			3067210261050Z		35	960 0176 209	Push switch	SW929, for E3	
2	960 0185 009	Power button	5090210201000Z	1				G000122000010	1.
3		Display window	5077210262040	1	35	963 0056 603	Push switch	SW929, for E2	
4	963 0054 906	Volume knob	5087210191010Z	1				G000040890000	
5	963 0053 703	5key button	5097210471000Z	1	36	960 0187 502	Headphone jack (D6.5)	JACK900	ı
6	963 0053 606	3key button	5090210511000Z	1				G402038400031	ı
7	963 0053 415	7(A)key button	5090210491001Z	1	46	963.0072.205	Trans bracket	4010210466001	l
. 8	963 0053 509	8key button	5090210501000Z	1	47	963 0053 017	Top cover	3000210096001	
9	963 0053 305	6key button	5090210481000Z	1	48	960 0187 900	Posistor P43T7D330BW16	F320161001020	
10	960 0191 417	LED lens	3710210043001	2	49	_	Heat sink	2120043538050	
11	963 0051 006	Knob spring	3720210116000	1	50	963 0072 302	Rubber cushion	4050210165000	
- 12	960 0198 229	Main chassis	3200210146301	1	51	963 0054 003	Shield cover	3070210056000	
13	960 0183 904	Foot Ass'v	400802006101C	4	52	963 0088 406	Earth plate C	4470210206000	
14	960 0184 107	Support bracket	4010210206000	1	53	963 0081 607	·	for E2	
15	960 0003 301	P.W.B. support	4070001601010	2				4010210686000	
16	963 0051 103		4300210062000	2	54	963 0044 602	P.W.B. support	for E2	
17	960 0180 509	FLT (16-ST-42GNK)	FL900	1		000 0011 002	Titi.b. ouppoit	4070210192000	
17	300 0 100 303	121 (10-01-42411)	K530164200010	1 ' 1	★ 55	963 0089 104	Ruhhar chaat	1210210235000	
10	000 0101 100	Remocon sensor NJL64H380A							
18	960 0181 100	nemocon sensor NJL04R380A	REM900		★ 56	960 0155 301	Wire clamper	for E3	
	000 0107 00	LED III CODDE (T	E940643800000		,	000 0155 00:	Maria alamana	4330040343010	
19	960 0197 204	LED HL50RDRF4T	LED900-902	3	★ 56	960 0155 301	wire clamper	for E2	
			K500052015010					4330040343010	
20	960 0184 408		4320200026000	1	★ 57	963 0054 207	Fuse caution label	for E3	
21	960 0181 207	Rotary encoder (EC16B2420431)	SW924	1				5527042410020	
	1		G121162420400	1		l			1

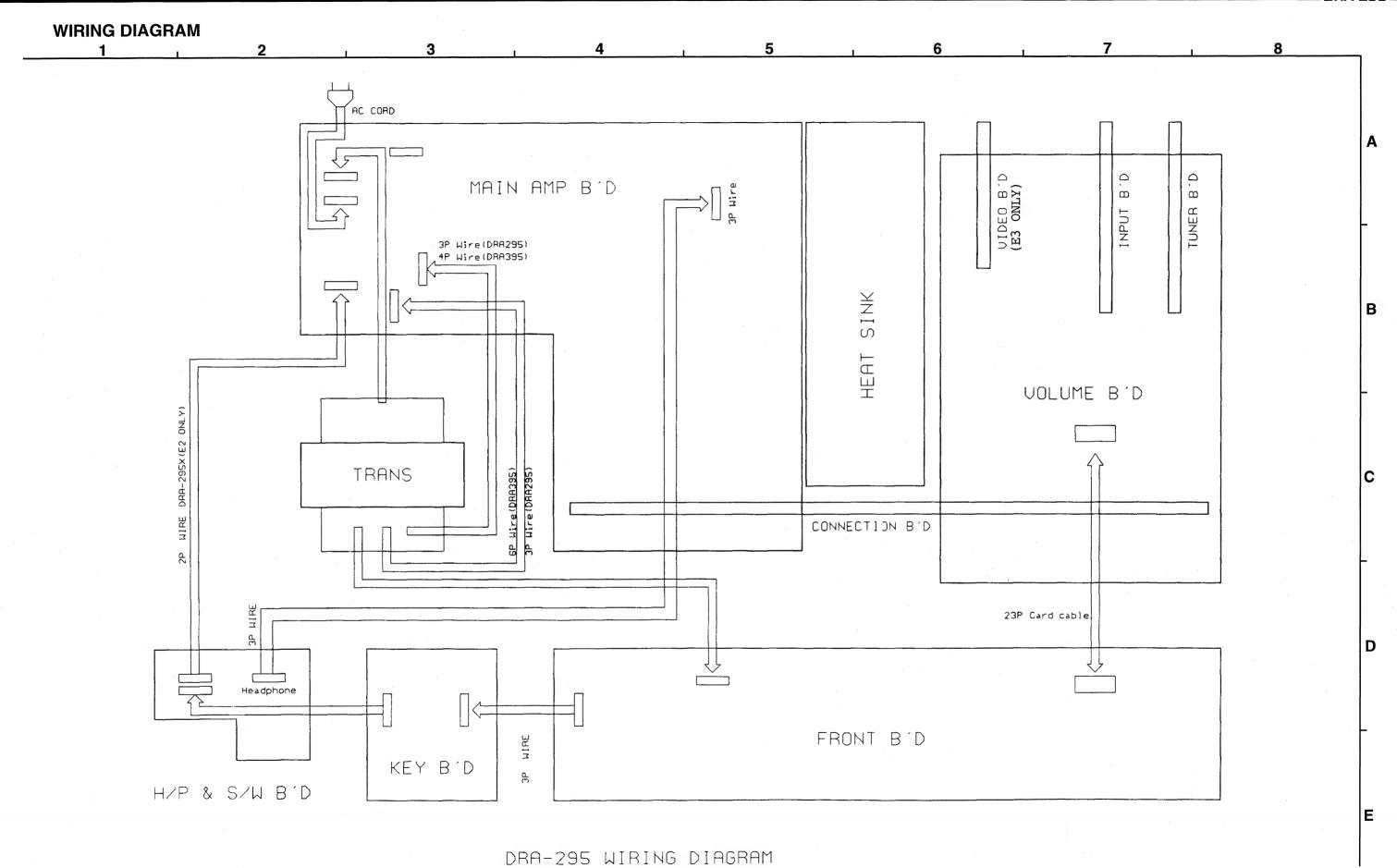
Ref. No.	Part No.	Part Name	Remarks	Q'ty
★ 58	963 0089 007	FFC cable	CP901	1
1 ^ "	000 0000 001		L301171230010	
			2001111200010	
SCREWS				_
А	963 0018 007	Screw 3×8 (B)-Z	B020030081B10	44
В	960 9008 527	Screw 3×8 (B) W-B	1500001456020	4
С	963 0048 200		B020030101B10	5
D	960 0108 714	' '	for E3	24
			B020030103B11	
D	960 0108 714	Screw 3×10 (B)-B	for E2	19
		, , , , , , , , , , , , , , , , , , ,	B020030103B11	
E	963 9004 009	Screw 3×14 (P) SW W-Z	B018230141H10	6
F	963 0018 104		B020030171B10	2
G	963 0048 307		1500040083B10	6
Н	963 9008 417	' '	B028940081B10	4
J	963 9004 025		B020740061B10	6
K	963 9004 025		1500001206010	2
K L	960 9008 420		1500001206010	1
<u> </u>	960 9008 420	Screw 3×8 (B) W-Z	1500001456010	'
1				1 1
	-			
1				
1				
		'		
1				
		·	}	
		*		
,	1	<u></u>		
		1	1	

## **PACKING VIEW**

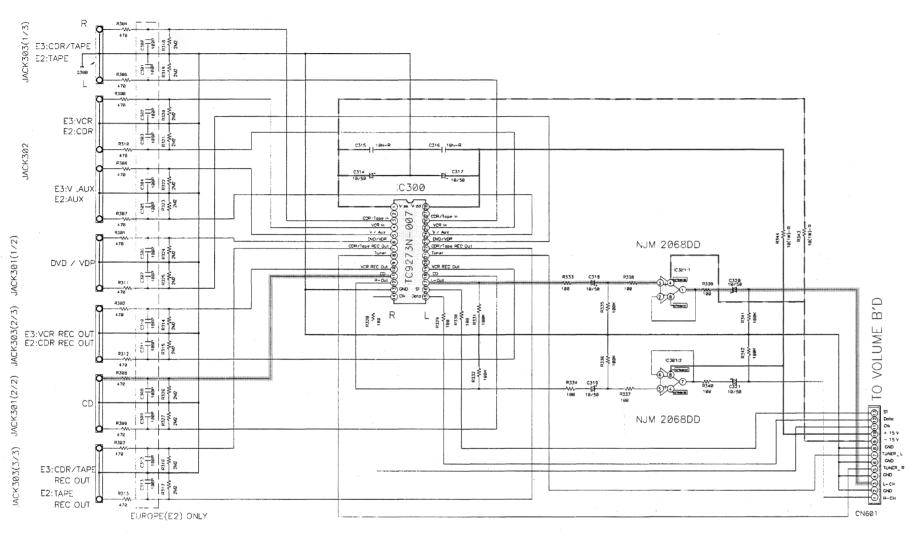


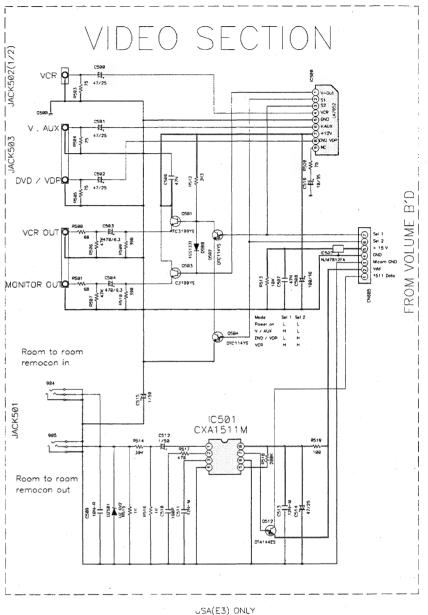
## PARTS LIST OF PACKING & ACCESSORIES Note: The symbols in the column "Remarks" indicate the following destinations. E2: Europe model

Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. No.	Part No.	Part Name	Remarks	Q'ty
2	963 0080 608	Instruction manual	for E3	1	10	_	RDS label	for E2	2
			5707210170250					5507051670010	
2	963 0080 611	Instruction manual	for E2	1	. 11	_	UPC label	for E3	1
			5707210170260					5507002330100	
3	963 0052 306	AM loop antenna	E605010090000	1	11	-	POS label	for E2	1.1
4	963 0081 102	FM antenna wire	E605010010000	1				5507002340090	
5	963 0052 704	FM antenna adapter	L109000180010	1	12	-	Control label	5500014920010	2
. 6	963 0088 707	Remote control unit RC-895	for E3	1	13		Battery (R6P/AA)	G670001R50010	2
			8300895000010		14	960 0185 601	Set poly bag	6330210019000	- 1
6	963 0088 804	Remote control unit RC-907	for E2	1	15		S.S. list (EX)	5777001620012	1
			8300907000010		16		DEL warranty home	for E3	1
7	963 0045 106	Poly bag	6330000240000	1		,		5777001610020	
8	963 0193 101	Cushion (L/R)	6230210154001	1	17	960 0093 104	Speaker terminal bushing	for E2	8
9	963 0080 705	Carton case	for E3	. 1				2410040353010	
			6007210310040						
9	963 0080 718	Carton case	for E2	1					
			6007210310070						



## INPUT SECTION





NOTICE
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:
Parts marked with this symbol have critical characteristics. Use ONLY replacement parts recommended by the manufacture.

CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kphms, the unit is defective.

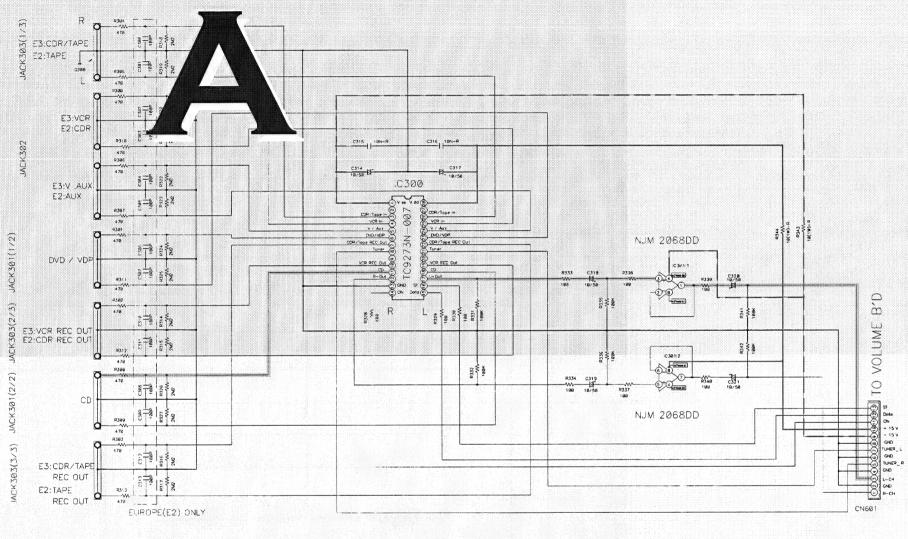
WARNING:

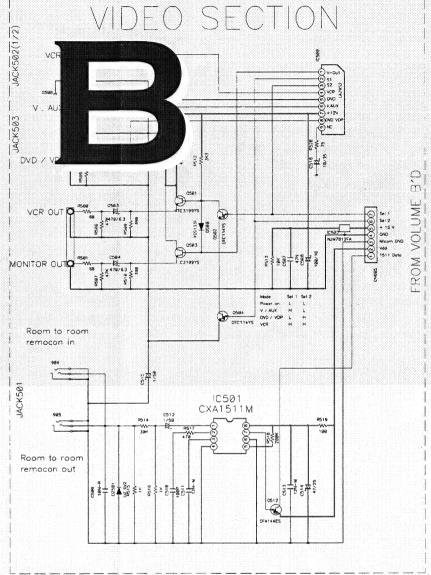
DO NOT return the unit to the customer until the problem is located and

--- + B LINE SIGNAL LINE

> SCHEMATIC DIAGRAMS(1/5) INPUT UNIT VIDEO UNIT

D





10

USA(E3) ONLY

+ B LINE SIGNAL LINE

NOTICE ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:

Parts marked with this symbol have critical characteristics.

Use ONLY replacement parts recommended by the manufacture. CAUTION:

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

WARNING:

DO NOT return the unit to the customer until the problem is located and

SCHEMATIC DIAGRAMS(1/5)
INPUT UNIT
VIDEO UNIT

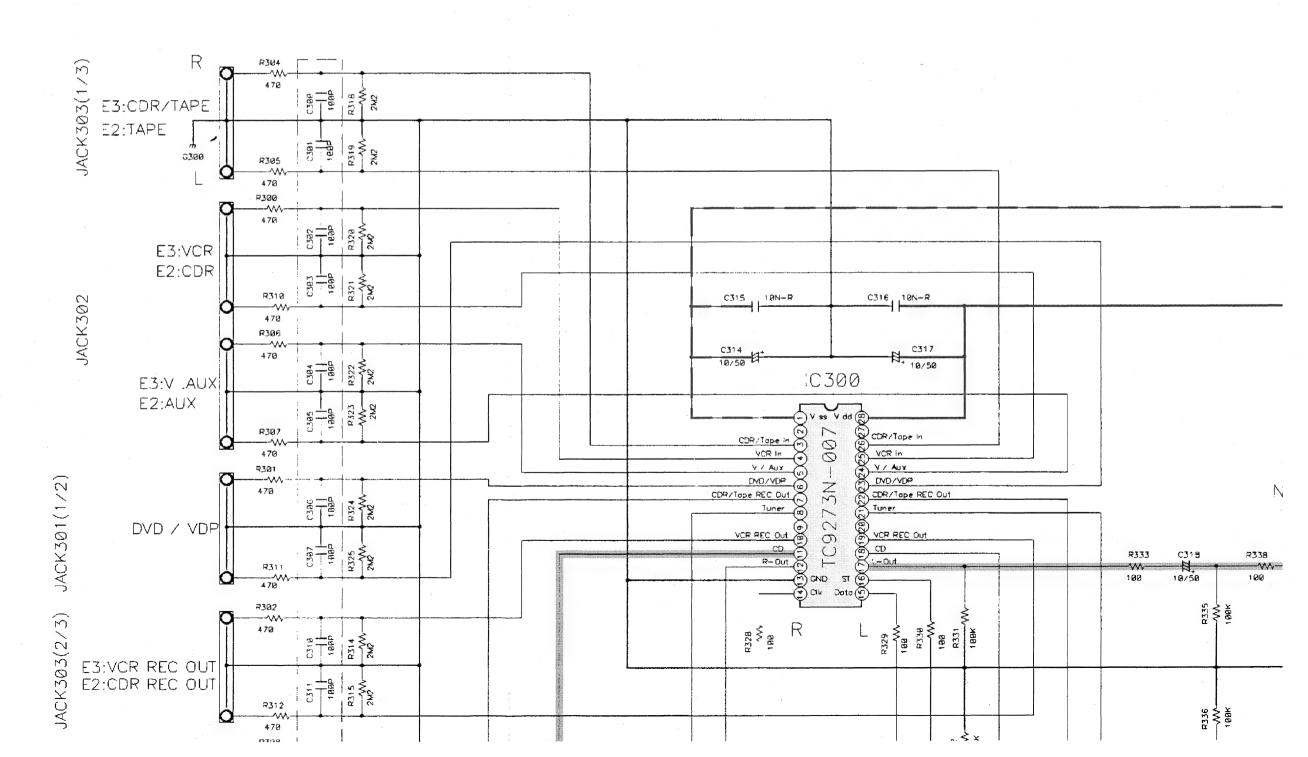
2 3

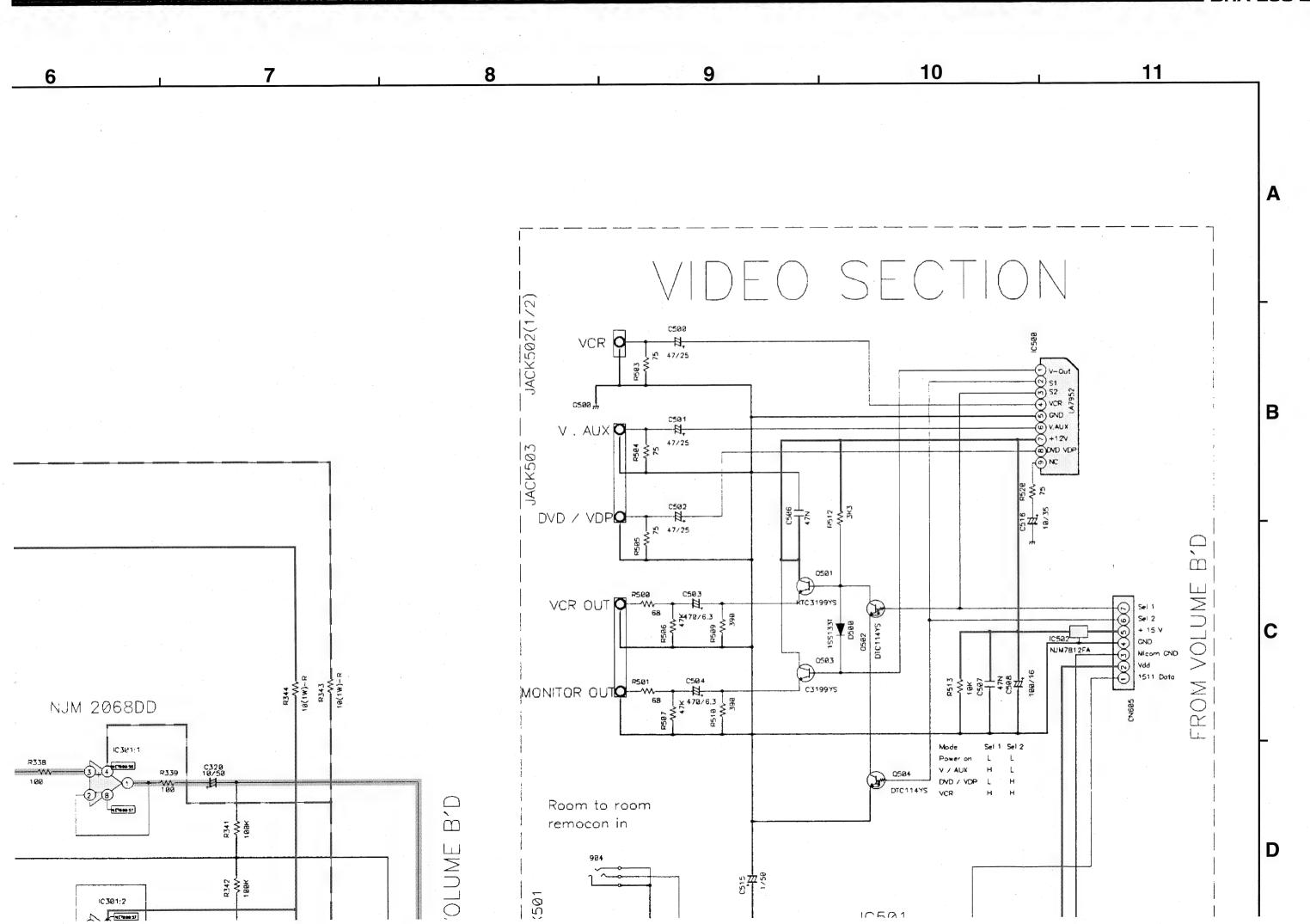
4

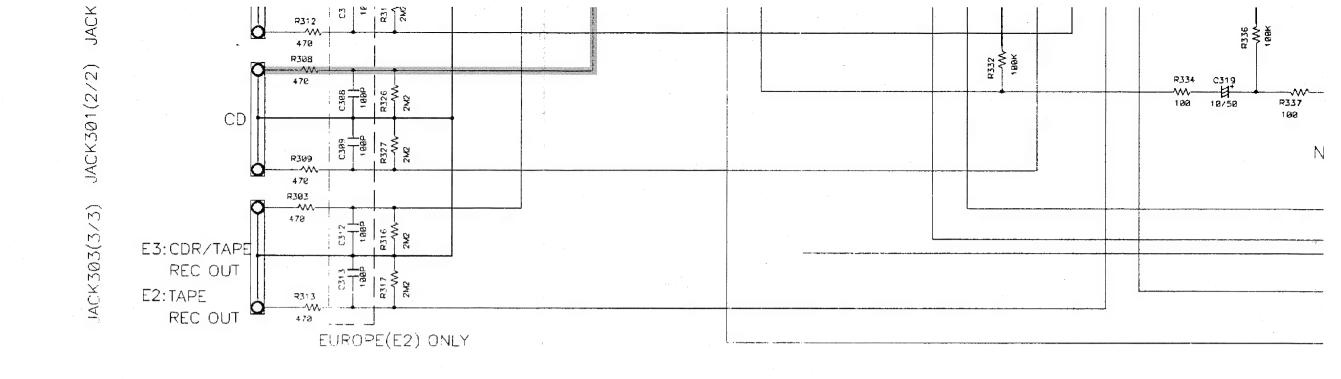
5

6

# INPUT SECTION







## NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

### **WARNING:**

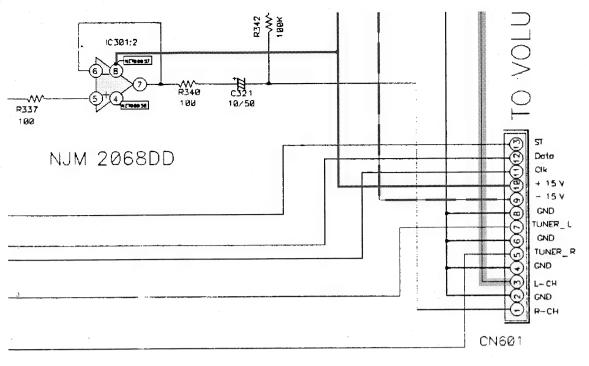
Parts marked with this symbol 1 ha Use ONLY replacement parts recommen

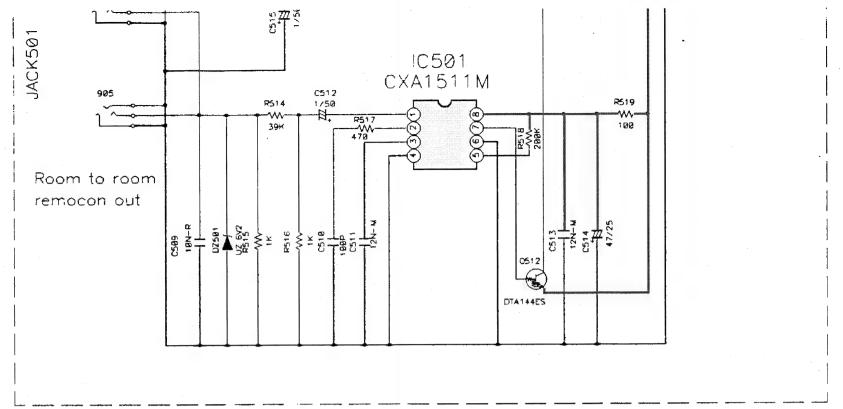
### **CAUTION:**

Before returning the unit to the customer, leakage current check or (2) a line to cha current exceeds 0.5 milliamps, or if the re of the power card is less than 460kohms

#### **WARNING:**

DO NOT return the unit to the customer  $\iota$  corrected.





USA(E3) ONLY

+ B LINE
- - B LINE
SIGNAL LINE

SCHEMATIC DIAGRAMS(1/5)
INPUT UNIT
VIDEO UNIT

have critical characteristics. commended by the manufacture.

ustomer, make sure you make either (1) a le to chassis resistance check. If the leakage r if the resistance from chassis to either side 0kohms, the unit is defective.

stomer until the problem is located and

E

## VOLUME SECTION CONNECTION SECTION NJM 2068DD IC601 M62446 NJM 2068DD FROM INPUT Power relay RLY(SPK\_A) RLY(SPK\_B) RLY(HP) Protection GND (Micom ) Power down —VKK (—36 V ) Muta B+ USA(E3) ONLY leadphone relay Main mute Protection MICOM →B CND ( Wicom ) -VKK ( -36v ) Power Down OPEN OPEN CN609 CP606 CN606 B'D BYD B′D FROM VOLUME CONNECTION MAIN TO TUNER B'D JSA(E3) ONLY 0 0 2000年 1000年 1 CP605 0230900 FROM FRONT B'D 111 Data (V 8.4 + ) bbv (V 8.4 + ) bbv (V 8.4 + ) 5 (V 8. TO VIDEO B'D --- + B LINE --- -- -- B LINE SIGNAL LINE WARNING: ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION. CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR Parts marked with this symbol have critical characteristics Use ONLY replacement parts recommended by the manufacture. CAUTION: GAUTION: Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

WARNING:

DO NOT return the unit to the customer until the problem is located and

SCHEMATIC DIAGRAMS(2/5) VOLUME UNIT

CONNECTOR UNIT

**SCHEMATIC DIAGRAMS(2/5)** VOLUME SECTION CONNECTION SECTION NJM 2068DD Moin mute MAIN IN-R OND MAIN IN-L 52 OND 52 OND 4 15 V - 15 V В FROM INPUT NJM 2068DD Power relay
RLY(SPK\_A)
RLY(SPK\_B)
RLY(HP)
Protection
GNO (Micorn )
Power down
--vrik (-36 V.)
Muna B+open Headphone relay
Malin mule
Protection
MICOM +B
CNO ( Micom )
-VKK ( -36V )
Pawer Dawn Headphore relay
Main muse

Main muse

Michaelian
MCOM +8

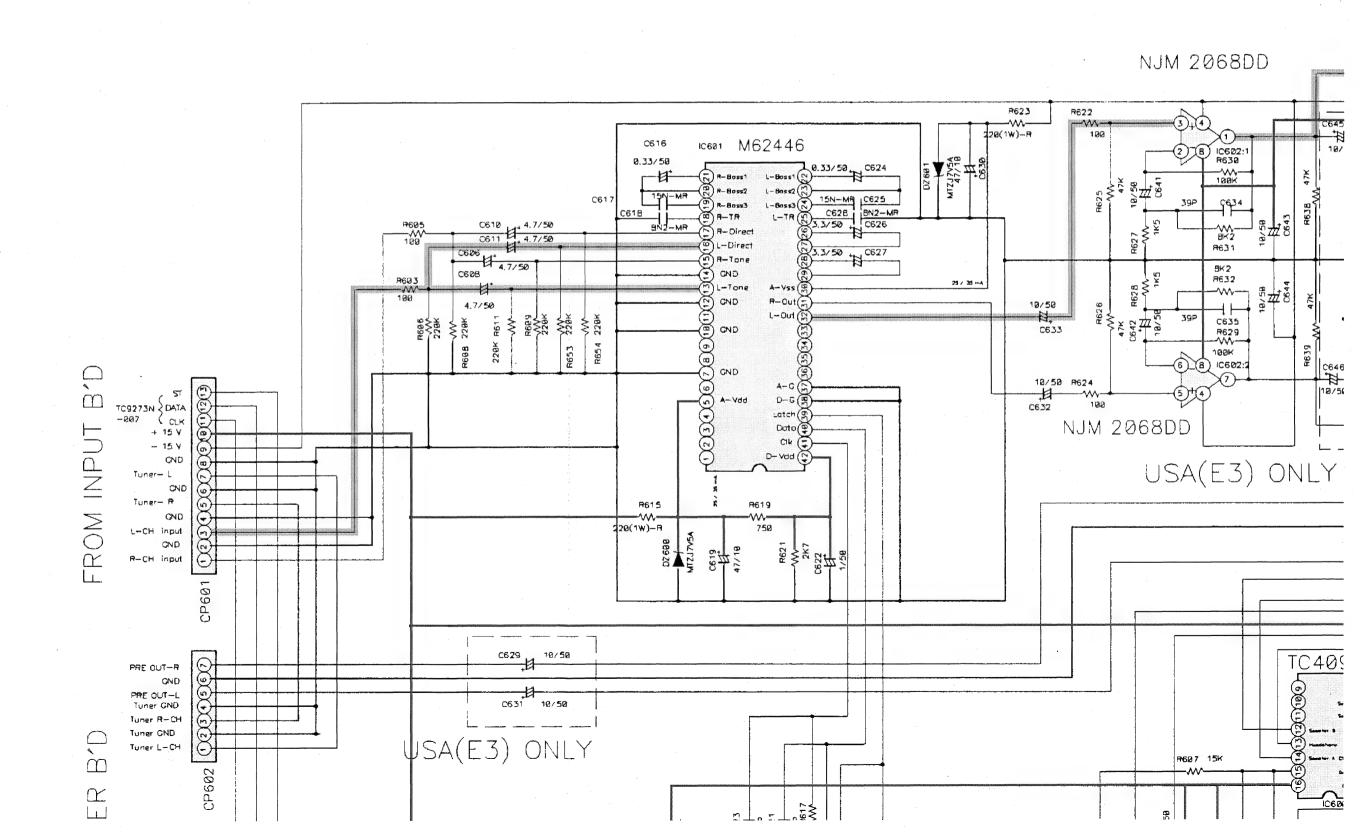
OND (Micom )

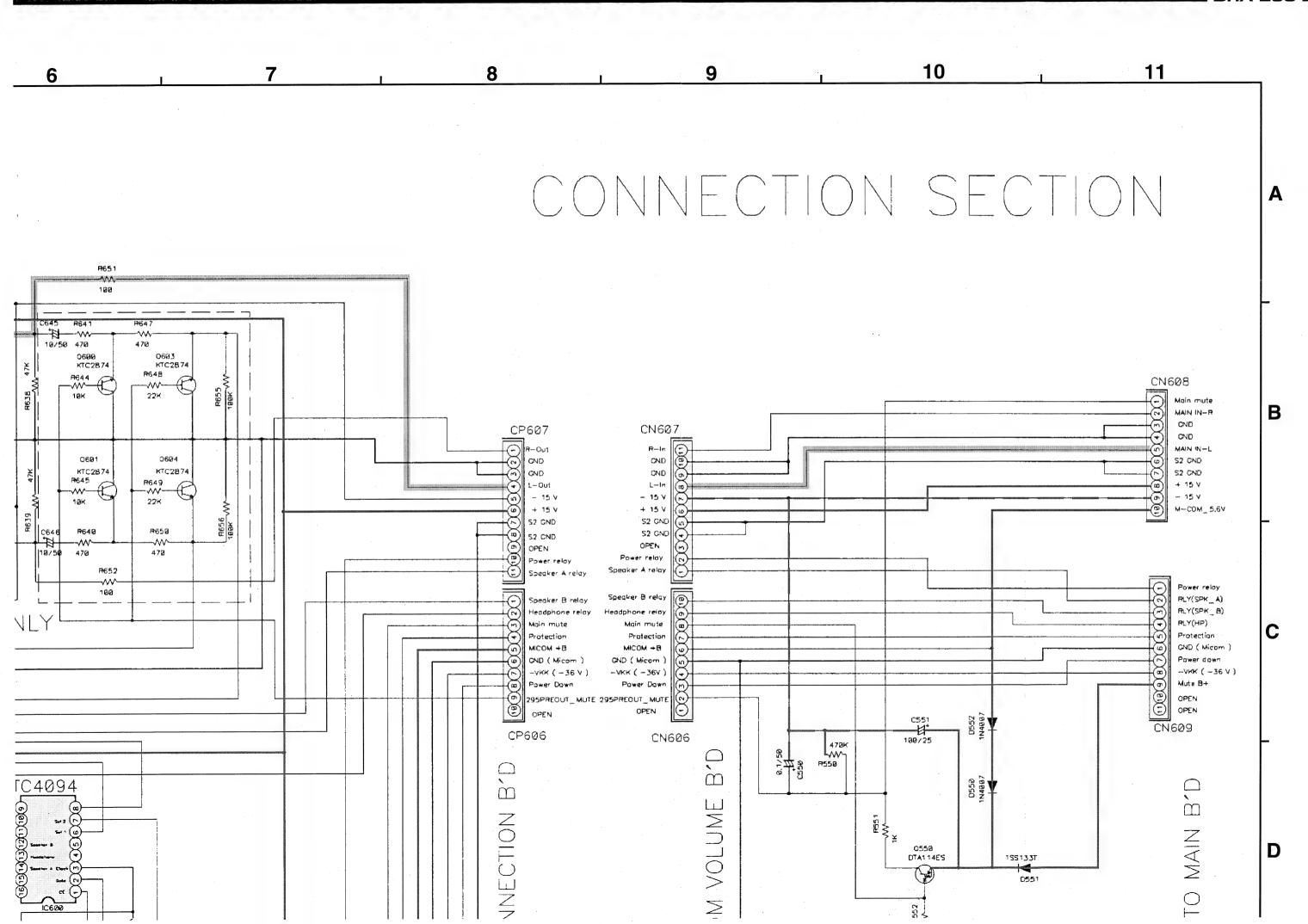
Power Down

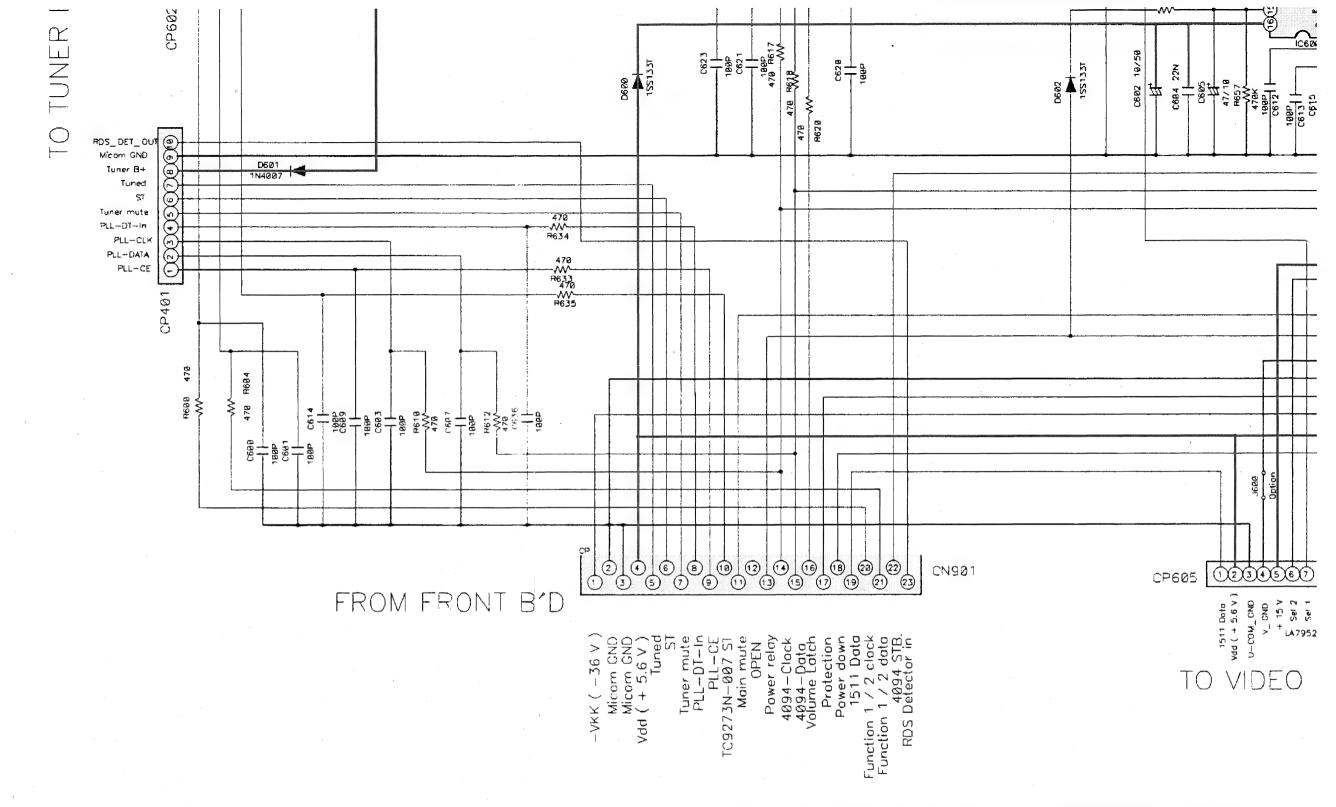
795PRECUT\_MATE

OPEN USA(E3) ONLY OPEN CP606 CN606 B′D m 8,0 FROM VOLUME CONNECTION MAIN TO TUNER B'D SA(E3) ONLY 0 0 CP605 1230300 FRONT B'D Dote 5.6 V) CND CND Set 2 Set 2 TO VIDEO B'D + B LINE --- - B LINE SIGNAL LINE WARNING:
Parts marked with this symbol \( \) \( \) have critical characteristics.
Use ONLY replacement parts recommended by the manufacture. ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CAUTION: CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective. SCHEMATIC DIAGRAMS(2/5) **VOLUME UNIT** CONNECTOR UNIT WARNING: DO NOT return the unit to the customer until the problem is located and

# VOLUME SECTION







## NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

## **WARNING:**

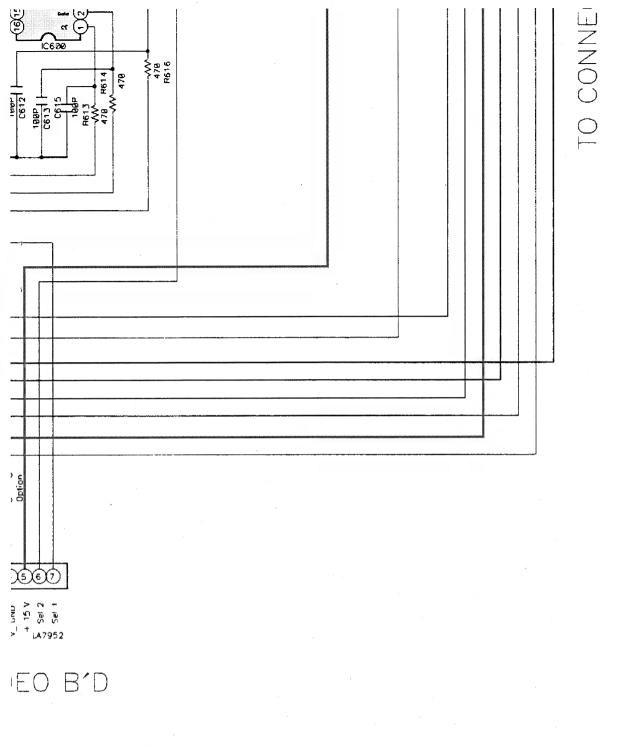
Parts marked with this symbol 1 has Use ONLY replacement parts recommen

#### CAUTION:

Before returning the unit to the custome leakage current check or (2) a line to ch current exceeds 0.5 milliamps, or if the I of the power card is less than 460kohms

#### **WARNING:**

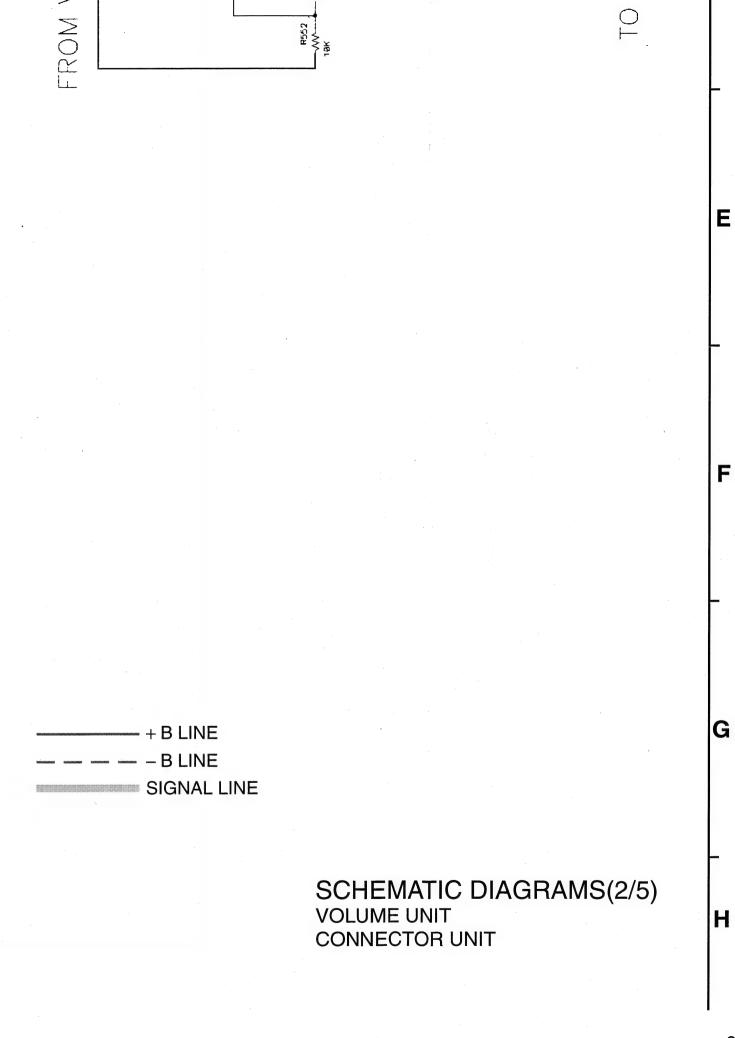
DO NOT return the unit to the customer corrected.



have critical characteristics. commended by the manufacture.

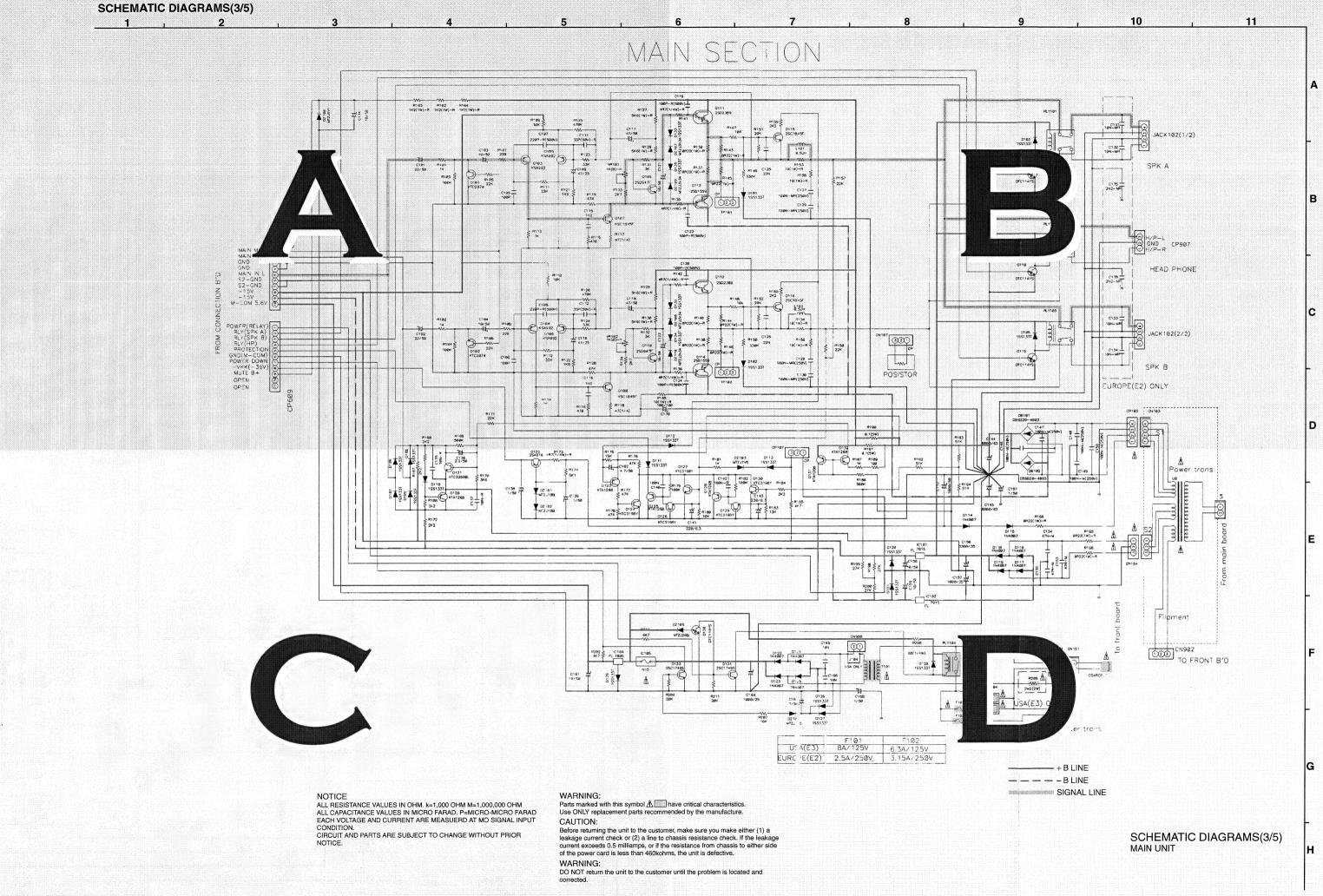
customer, make sure you make either (1) a ne to chassis resistance check. If the leakage or if the resistance from chassis to either side 50kohms, the unit is defective.

ustomer until the problem is located and



WARNING:
DO NOT return the unit to the customer until the problem is located and

**SCHEMATIC DIAGRAMS(3/5)** 



. 2

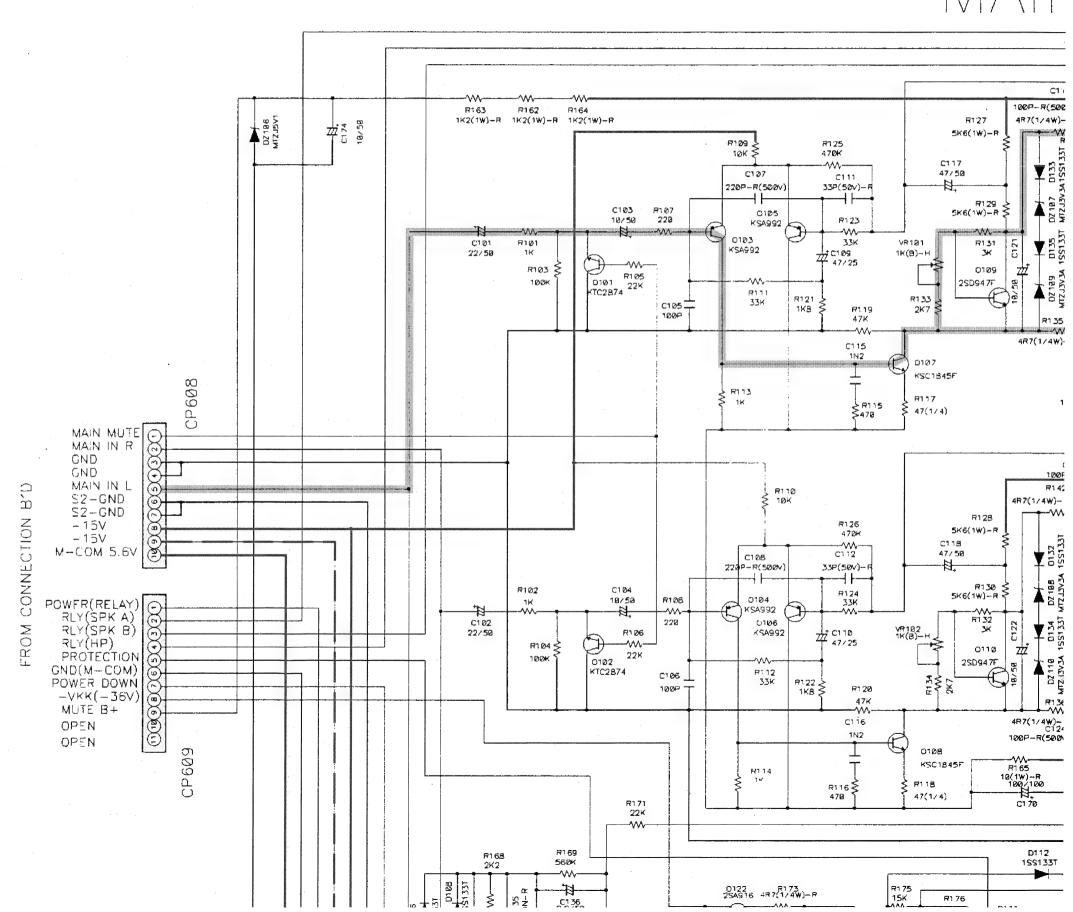
3

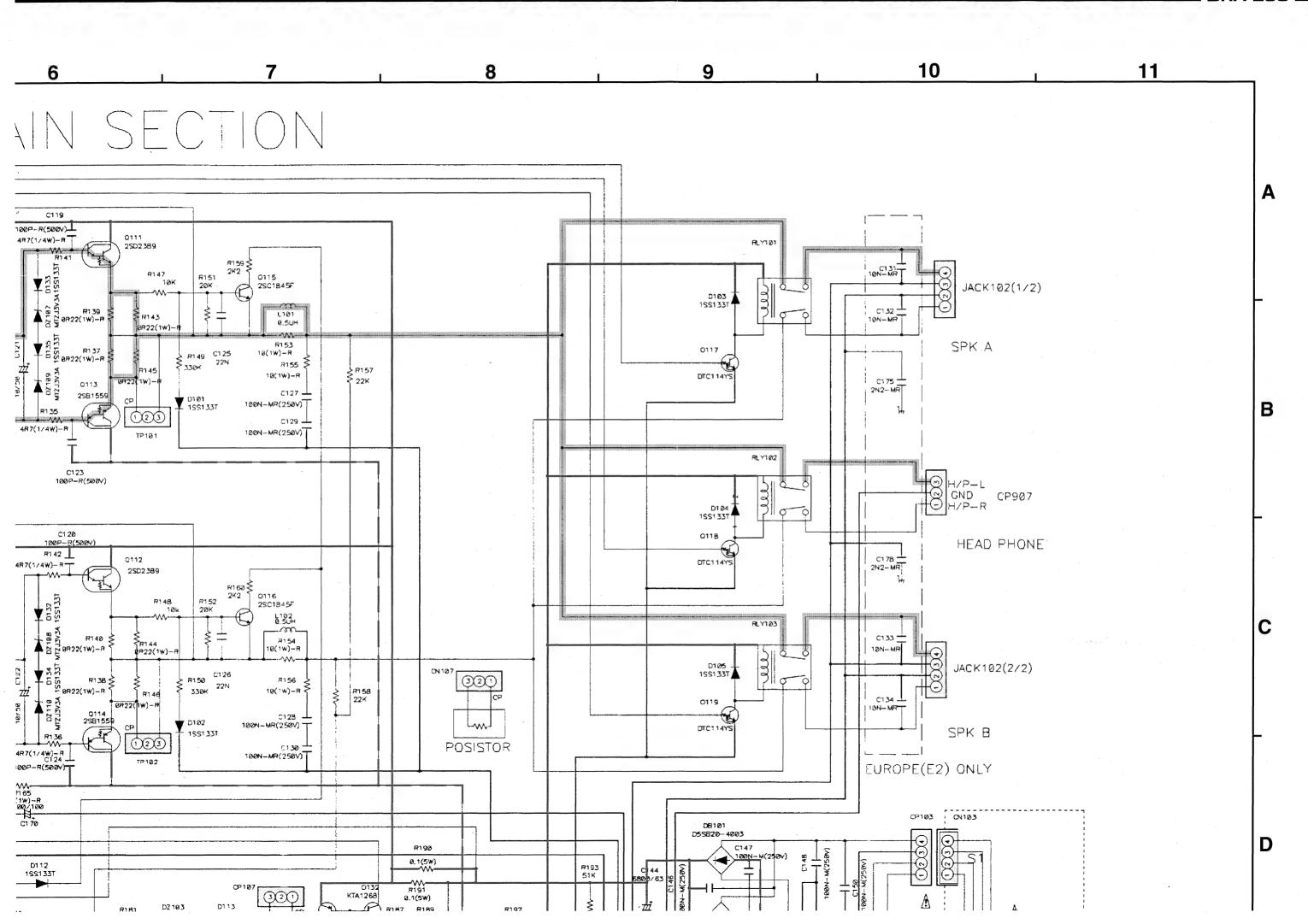
4

5

ı

MAII





		2K2 560K  C136 2.2750  O121 KTC3200BL 3KI 1SS1331 O120 KTA1268 C136 C2.2750  R188  R172 2k2	70 6 C138 777 1/50	0122 2SA916 4R7(1/4) WW DZ 121 MTZJ18B	V)−R R174 S5K1 777 C:39 1/50	C162 4.7/ D123 KTA1266 R17	0125 177
					7 1		
							DZ16 F217
					C161 277 19759	202 × 1C104 4K7 × 1. 7805 1£1551	IC105 O133 N15 25C174E
							F204 20K

# NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

# **WARNING:**

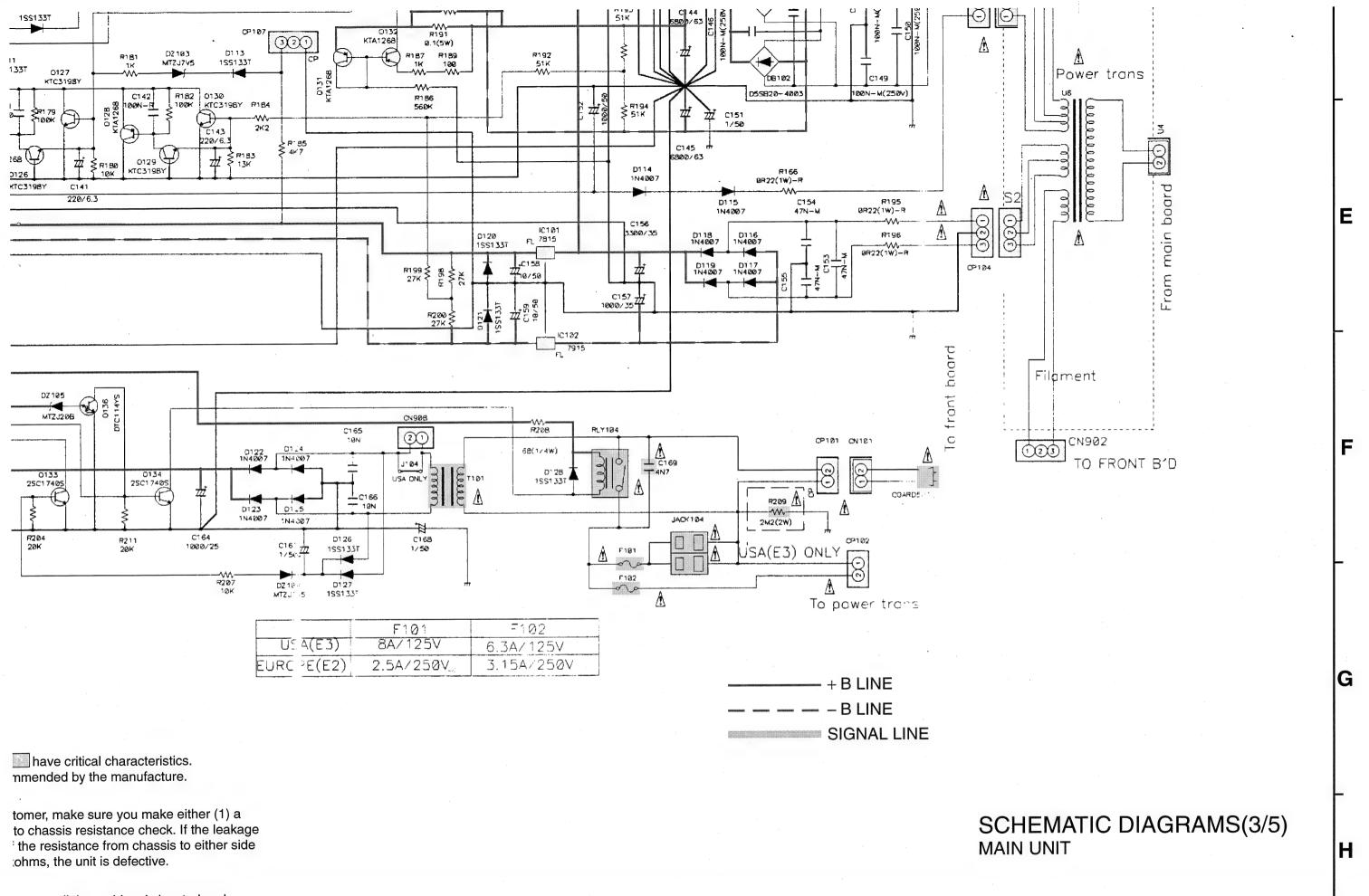
Parts marked with this symbol 1 have Use ONLY replacement parts recommende

# **CAUTION:**

Before returning the unit to the customer, rr leakage current check or (2) a line to chass current exceeds 0.5 milliamps, or if the resi of the power card is less than 460kohms, the

# WARNING:

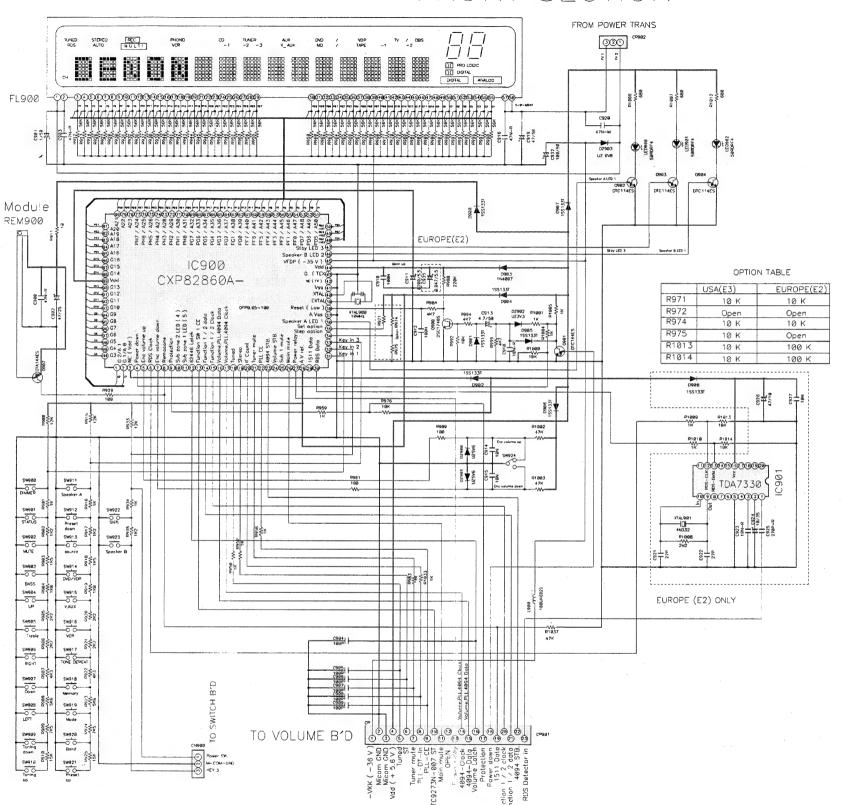
DO NOT return the unit to the customer uncorrected.



omer until the problem is located and

В

FRONT SECTION



NOTICE ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

### WARNING:

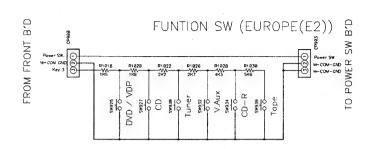
Parts marked with this symbol 1 have critical characteristics. Use ONLY replacement parts recommended by the manufacture.

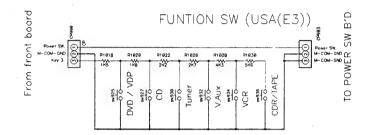
### CAUTION:

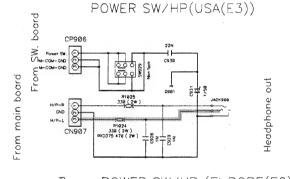
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

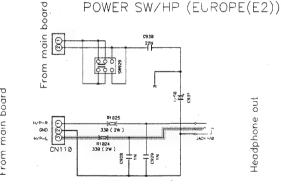
### WARNING:

DO NOT return the unit to the customer until the problem is located and









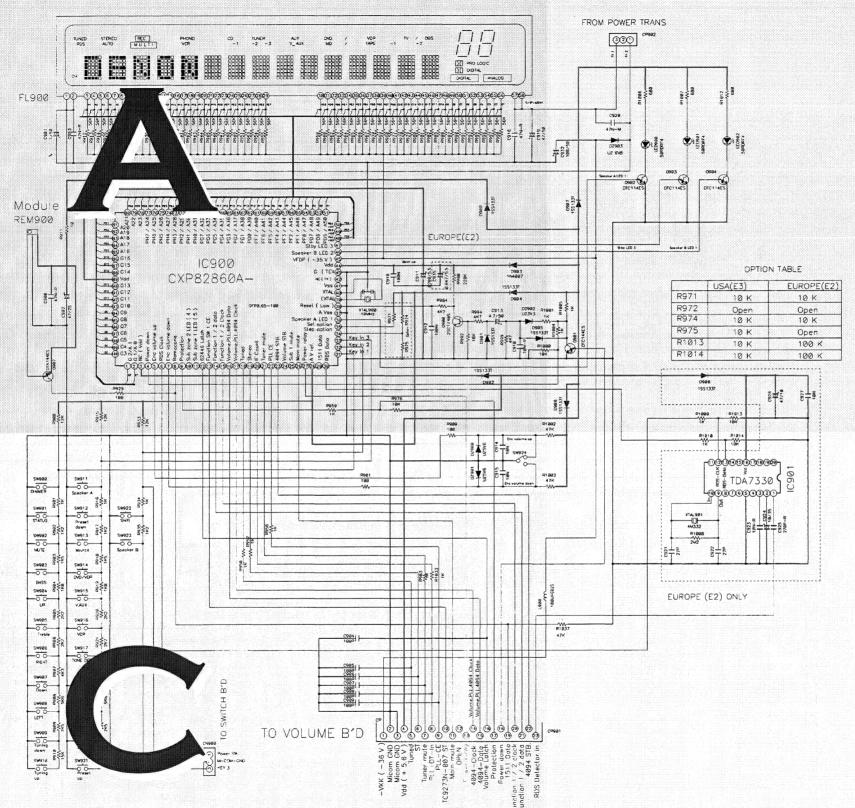
- + B LINE SIGNAL LINE

> SCHEMATIC DIAGRAMS(4/5) FRONT UNIT SWITCH UNIT POWER SW/HP UNIT

В

11

# FRONT SECTION



NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT
CONDITION

CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

# WARNING:

Parts marked with this symbol have critical characteristics.

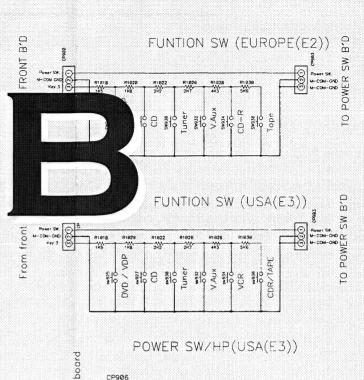
Use ONLY replacement parts recommended by the manufacture.

#### CAUTION:

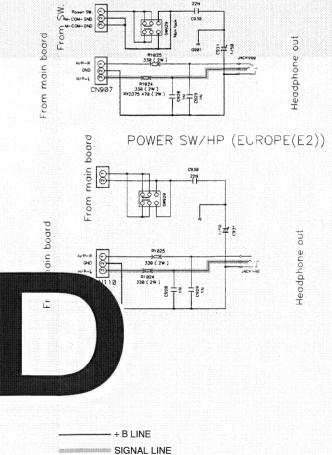
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

### WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.



10



SCHEMATIC DIAGRAMS(4/5) FRONT UNIT SWITCH UNIT POWER SW/HP UNIT 2

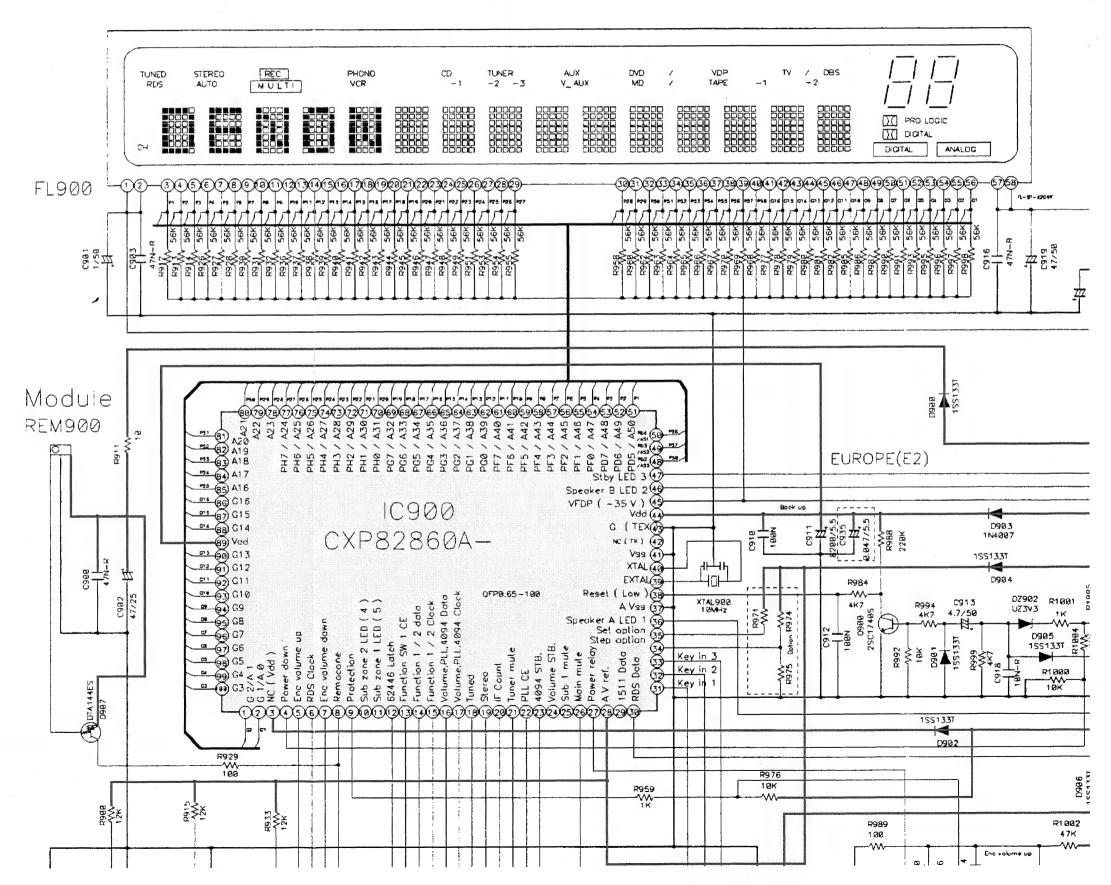
1

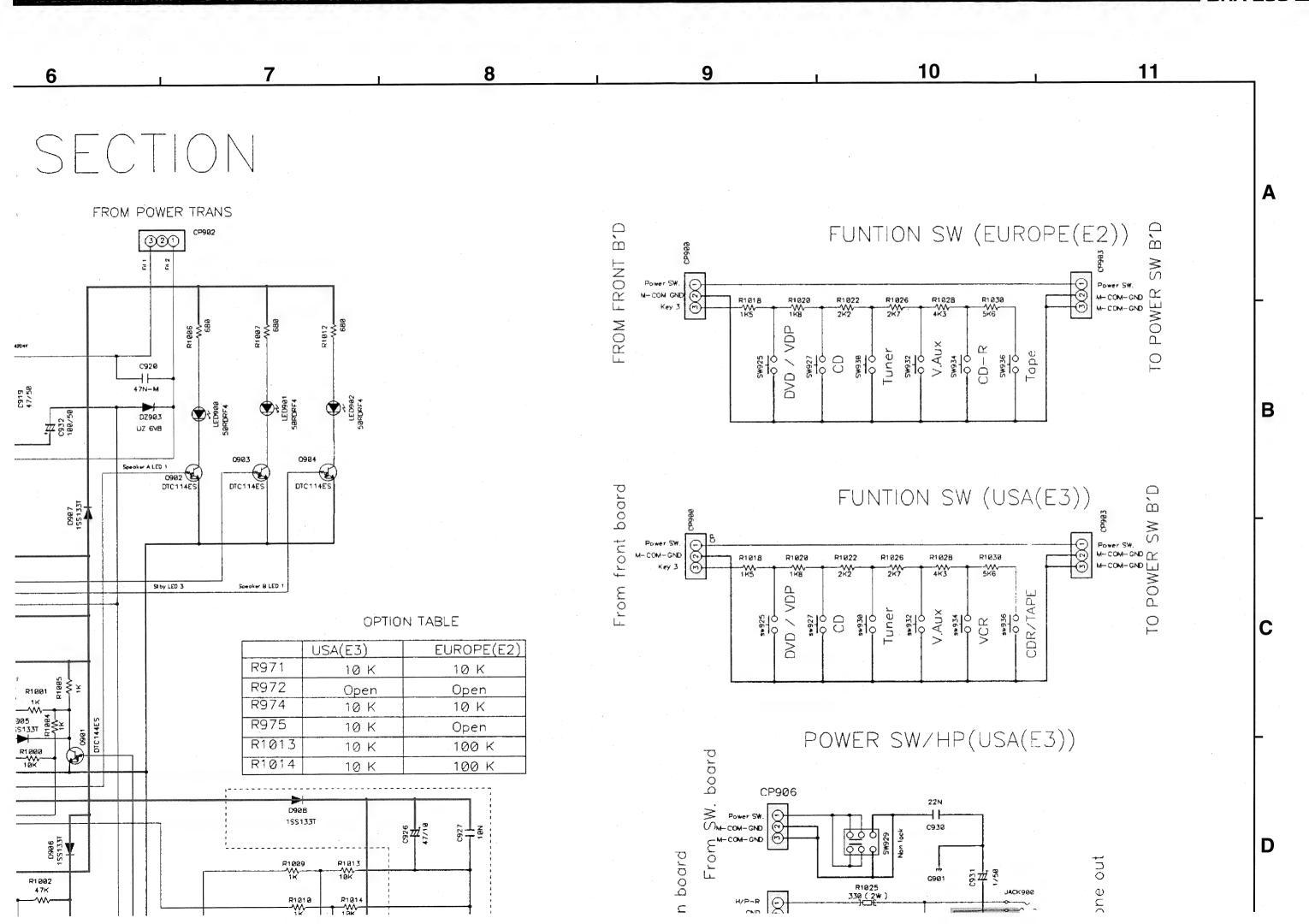
5

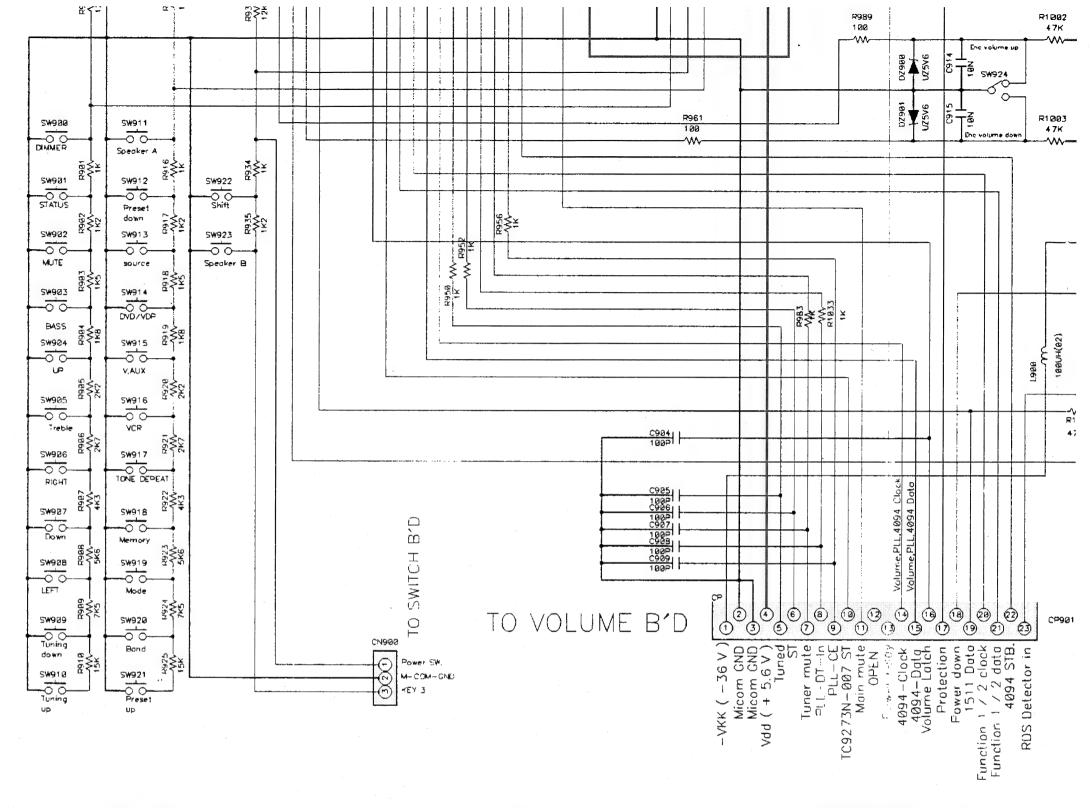
. . .

# -RONT S

6







### NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

### **WARNING:**

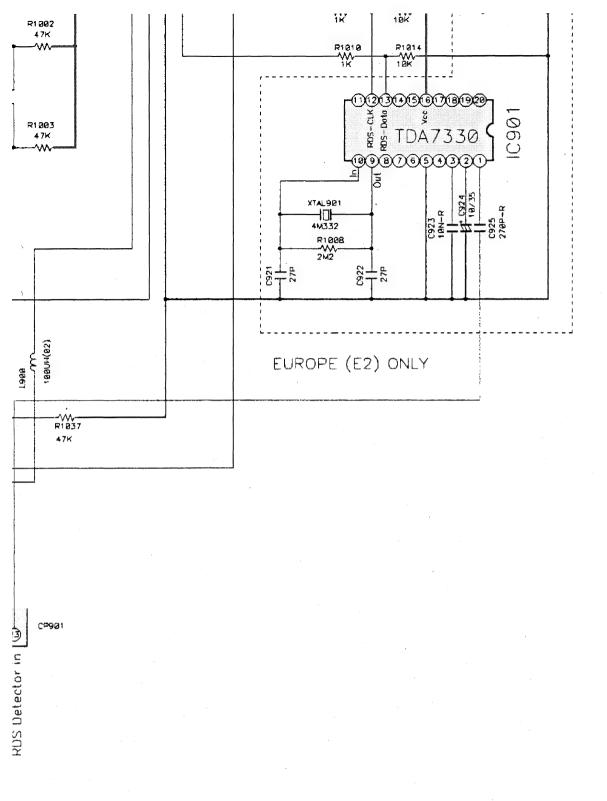
Parts marked with this symbol 1 have Use ONLY replacement parts recommer

# **CAUTION:**

Before returning the unit to the custome leakage current check or (2) a line to chacurrent exceeds 0.5 milliamps, or if the r of the power card is less than 460kohms

# **WARNING:**

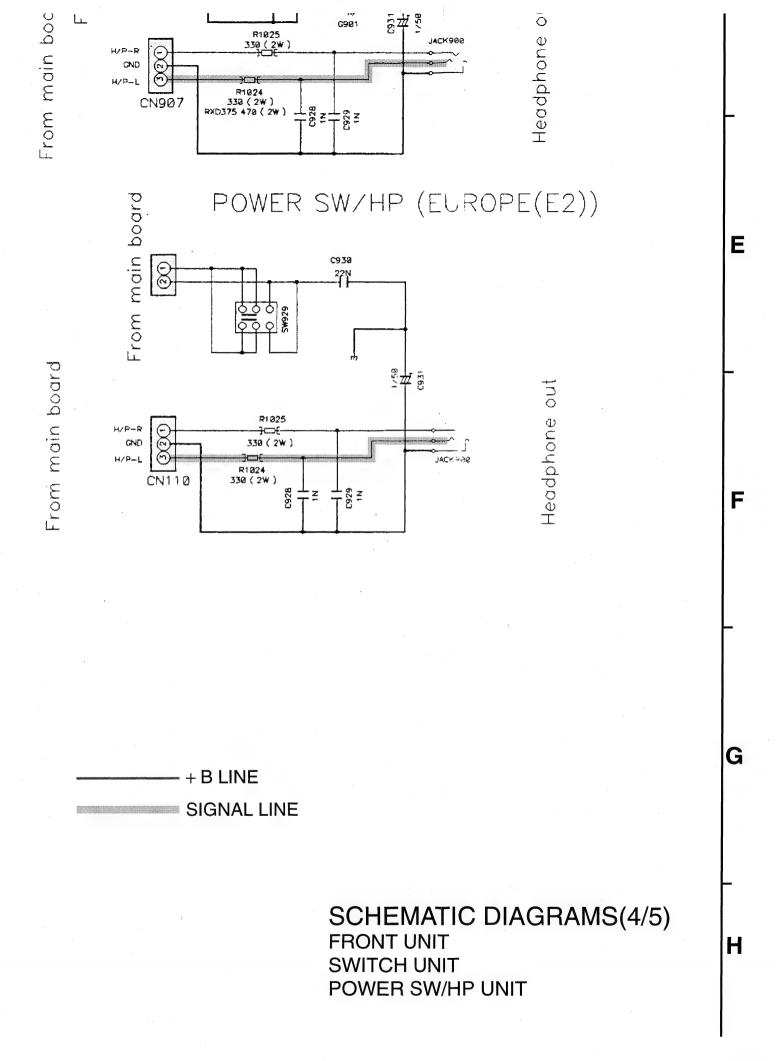
DO NOT return the unit to the customer corrected.

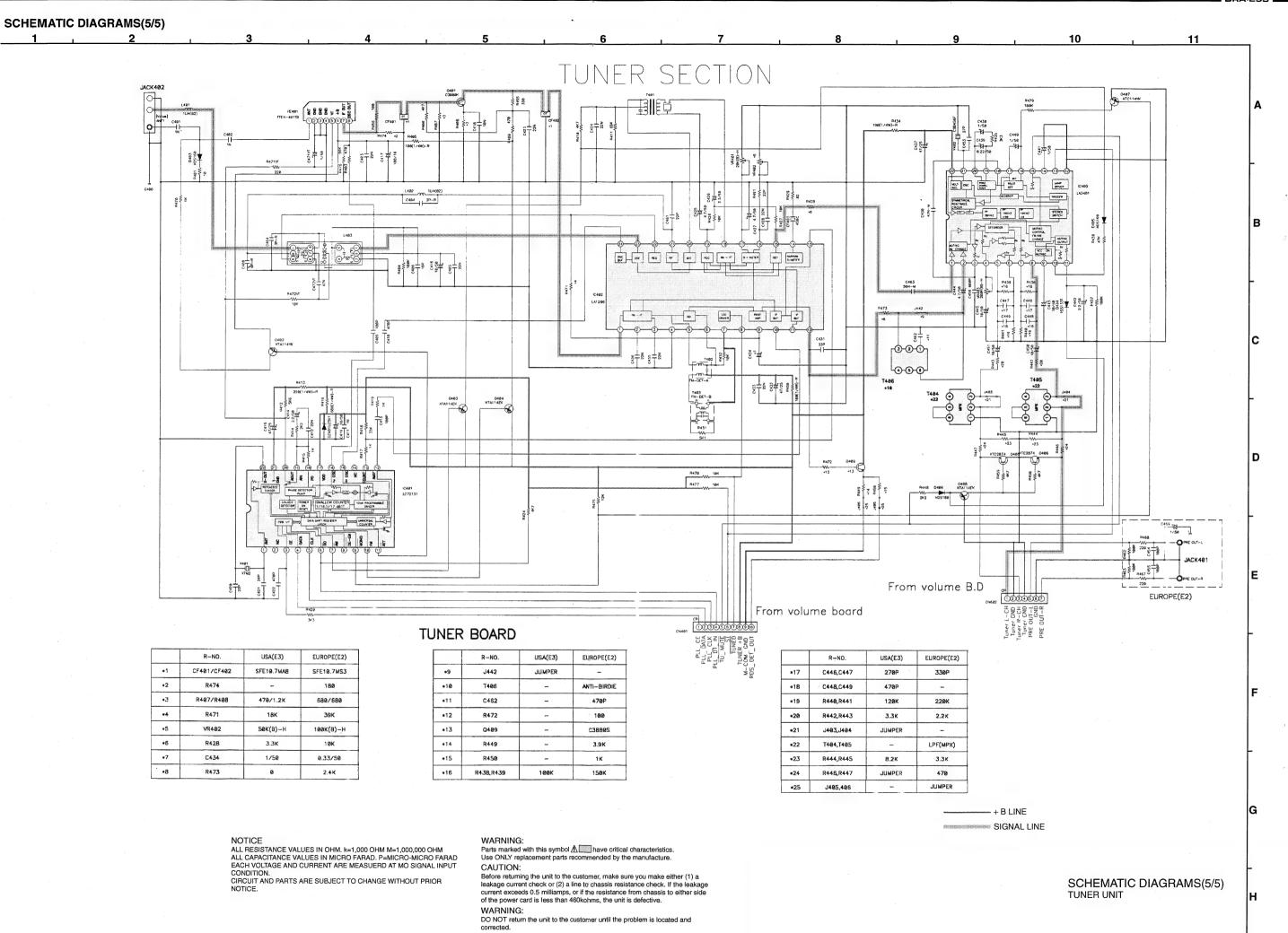


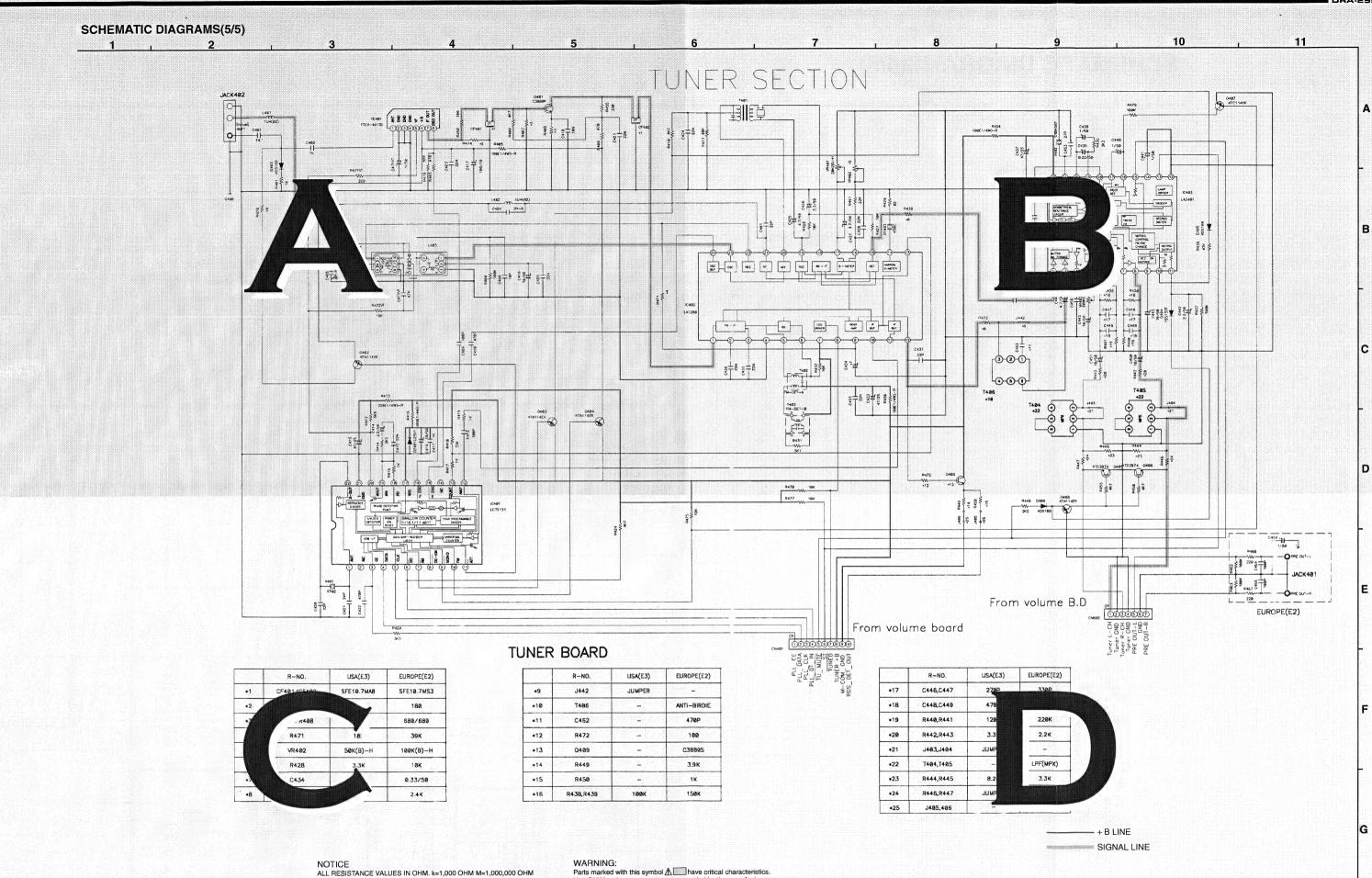
\( \sum\_{\text{have critical characteristics.}} \) commended by the manufacture.

customer, make sure you make either (1) a ne to chassis resistance check. If the leakage or if the resistance from chassis to either side 30kohms, the unit is defective.

ustomer until the problem is located and







ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

Parts marked with this symbol have critical characteristics.

Use ONLY replacement parts recommended by the manufacture.

CAUTION:

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

WARNING:

DO NOT return the unit to the customer until the problem is located and

SCHEMATIC DIAGRAMS(5/5) **TUNER UNIT** 

. 2

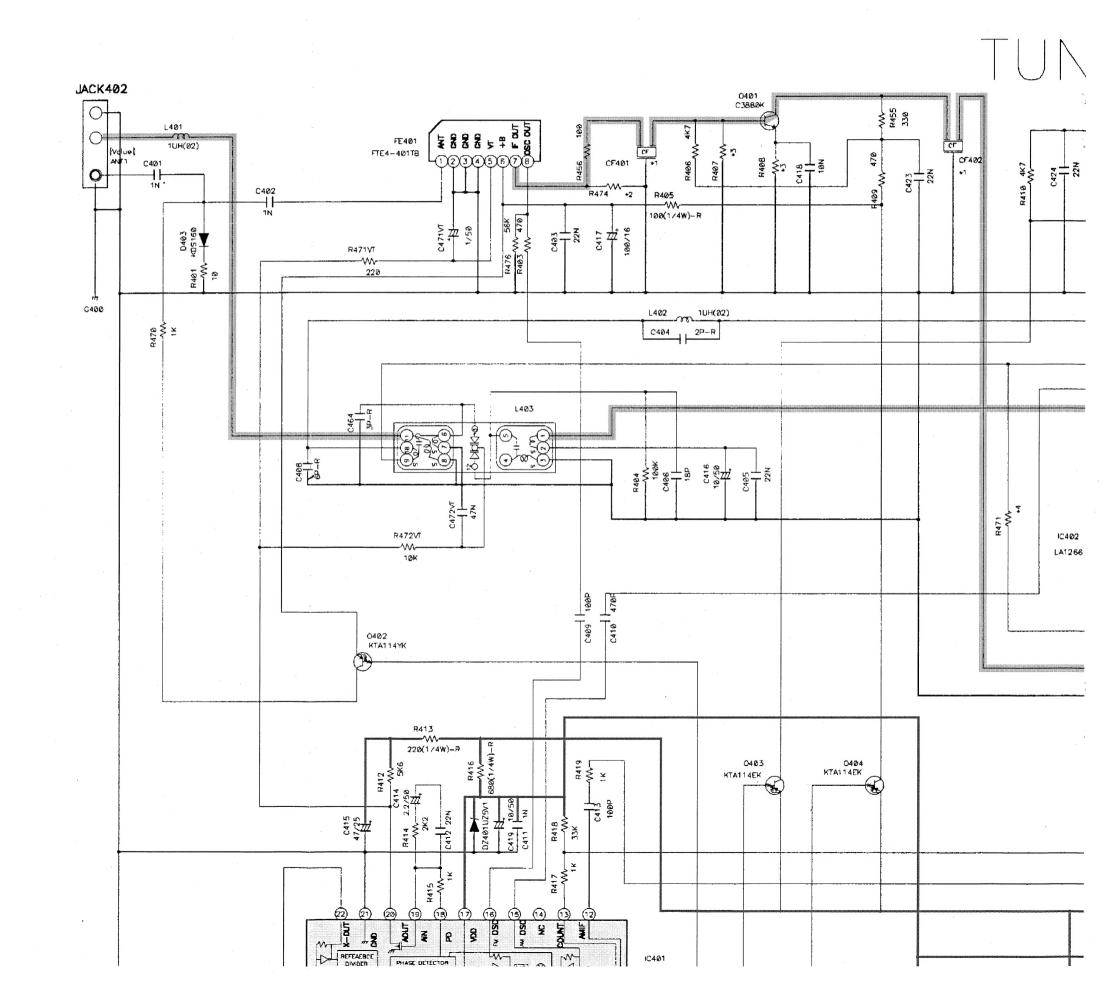
3

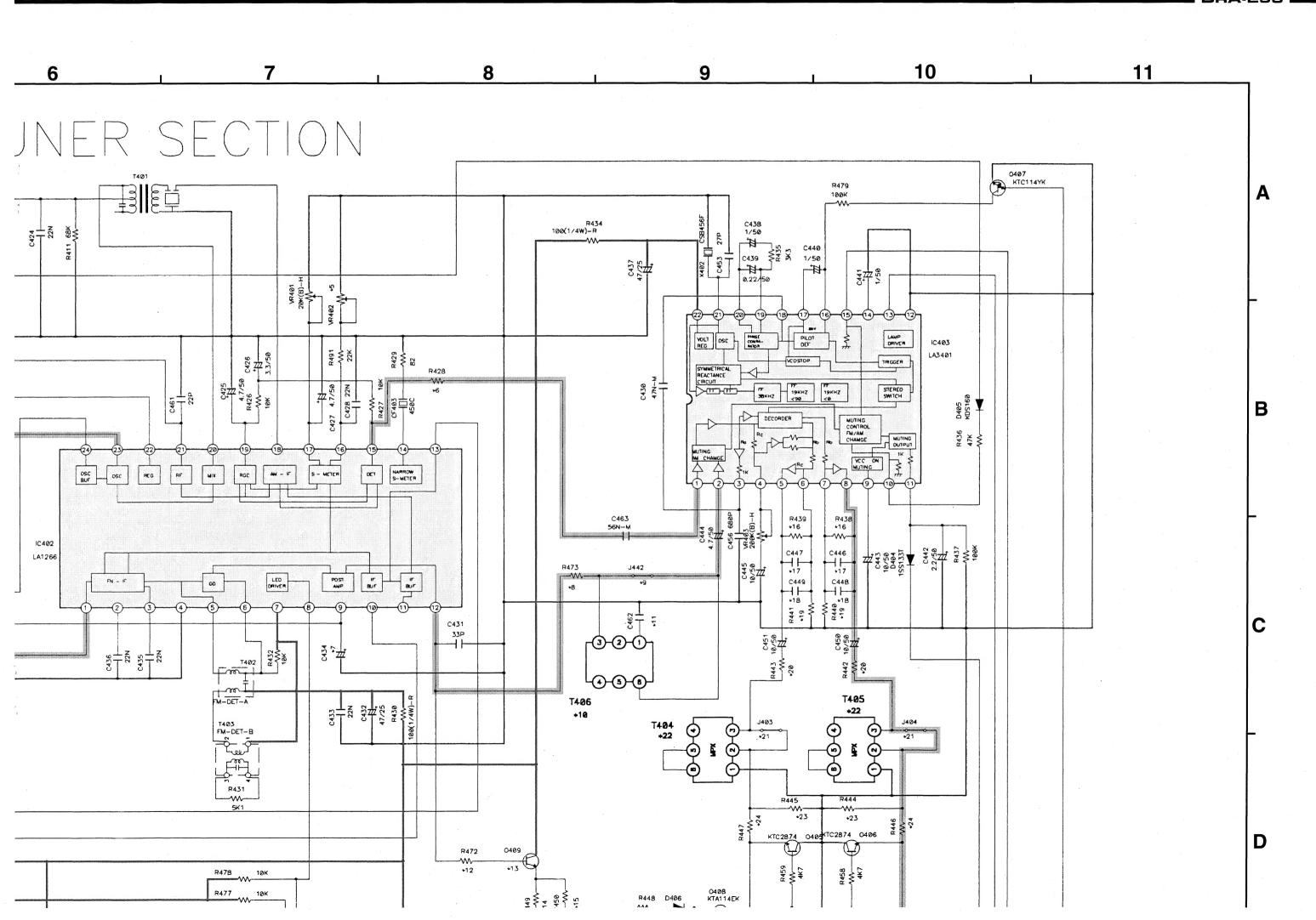
4

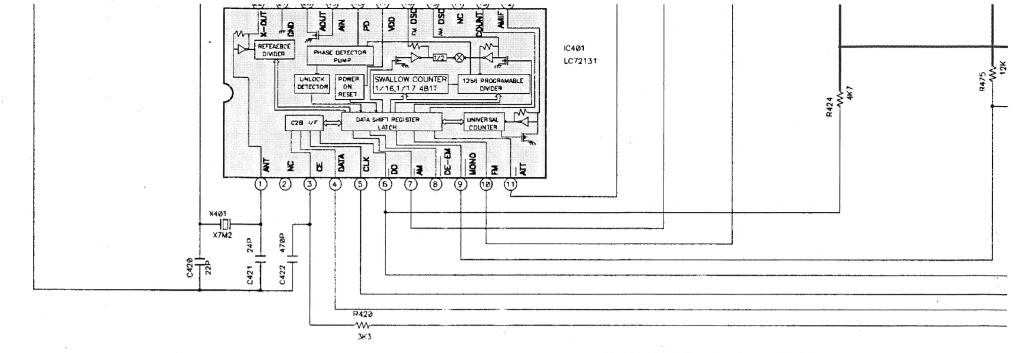
5

•

<u>6</u>







# TUNER BOARD

	R-NO.	USA(E3)	EUROPE(E2)	
<b>+1</b>	CF401/CF402	SFE10.7MAB	SFE10.7MS3	
*2	R474	_	180	
*3	R407/R408	470/1.2K	680/680	
*4	R471	18K	39K	
*5	VR402	<b>50K(B)</b> —H	100K(B)-H	
*6	R428	3.3K	1 <b>0K</b>	
<b>*</b> 7	C434	1/50	0.33/50	
*8	R473	0	2.4K	

	R-NO.	USA(E3)	EUROPE
<b>*</b> 9	J442	JUMPER	_
*10	T406	_	ANTI-BI
<b>*11</b>	C462	_	4701
*12	R472	_	100
*13	Q409		C388(
*14	R449	_	3.9k
<b>*</b> 15	R450	<del>-</del>	1K
*16	R438,R439	100K	1501

# NOTICE

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD EACH VOLTAGE AND CURRENT ARE MEASUERD AT MO SIGNAL INPUT CONDITION.

CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

# **WARNING:**

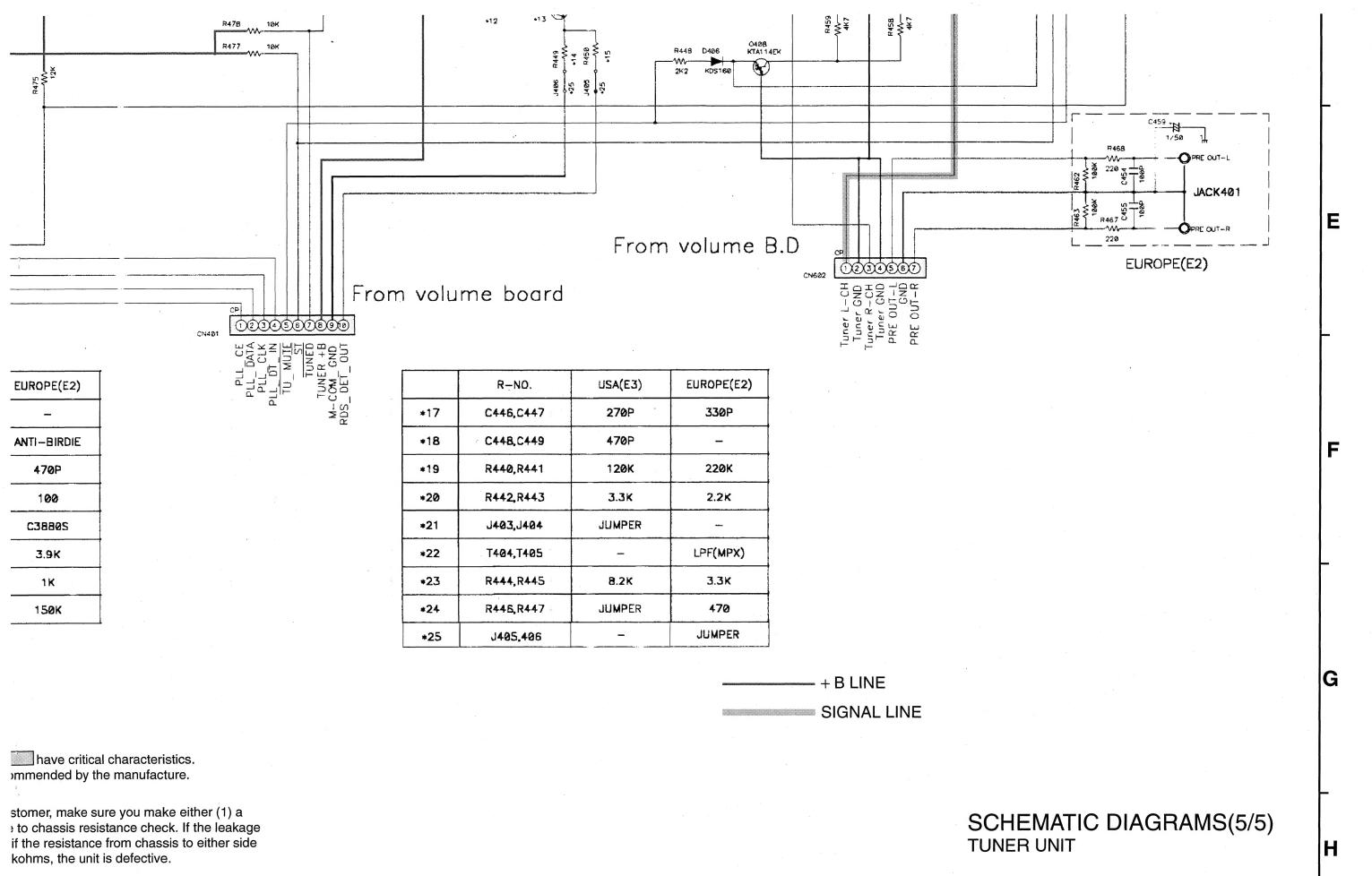
Parts marked with this symbol 1 hav Use ONLY replacement parts recommend

# **CAUTION:**

Before returning the unit to the customer, I leakage current check or (2) a line to chas current exceeds 0.5 milliamps, or if the resof the power card is less than 460kohms,

# **WARNING:**

DO NOT return the unit to the customer uncorrected.



tomer until the problem is located and

69